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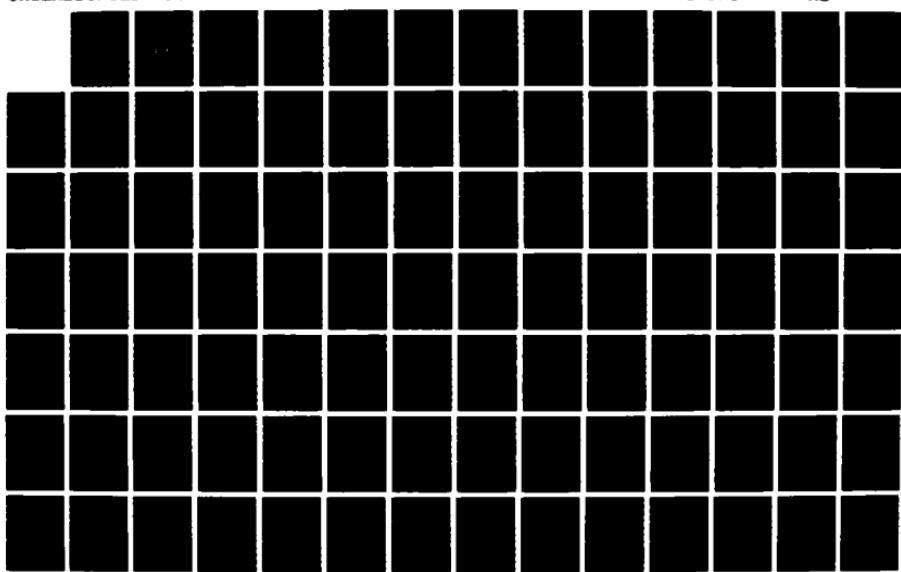
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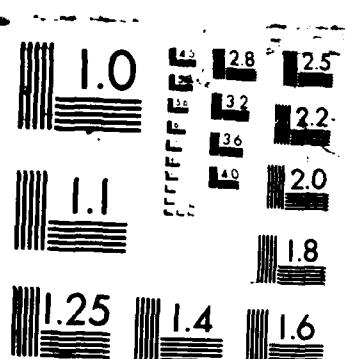
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20. ABSTRACT This is the Soviet Laser Bibliography for September-October 1986, and is No. 85 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; crystal growing; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications systems; beam propagation; adaptive optics; computer technology; holography; laser-induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.		

INTRODUCTION

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is September-October 1986, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Soviet Reference Journals (journals of abstracts) are also included. Laser items from the popular or semipopular press are generally omitted. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library.

Since our computer is not now able to print between lines, superscripts and subscripts are indicated by (sup) and (sub).

We are producing the entire bibliography on computer. To make our bibliography compatible with other data bases, for source abbreviations, we use the letter codens generally used in our own government rather than transliterations of abbreviations used in the Soviet Union. Likewise, we use letter codens to designate affiliations. The authors' affiliations are indicated in parentheses after the authors' names in the text. Empty parentheses indicate that the affiliation was not given. A source abbreviations list, authors' affiliations list, and author index are included in the back of the bibliography.

SOVIET LASER BIBLIOGRAPHY, SEPTEMBER-OCTOBER 1986

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I. BASIC RESEARCH

A. SOLID STATE LASERS

1. Crystal

a. Miscellaneous

1. Antipenko, B.M.; Krutova, L.I.; Sukhareva, L.K. (). Cascade generation of GSGG-Cr+Tm+Ho crystals. OPSPA, vol. 61, no. 3, 1986, 659-661.
2. Bohm, J.; Hermoneit, B.; Reiche, P.; Schultze, D.; Kaminskiy, A.A.; Lomonov, V.A.; Sarkisov, S.E. (). Laser crystal. Patent GDR, no. 233695, 5 Mar 1986. (RZRAB, 86/10Ye99).
3. Ivanov, N.A.; Inshakov, D.V.; Parfianovich, I.A.; Khulugurov, V.M. (NIIPFI). Lasers using LiF and NaF crystals with a F_(sub1)F_(sub2) to F_(sub2)^(sup+) transformation under flashlamp pumping. PZTFD, no. 20, 1986, 1250-1253.
4. Kruglik, G.S.; Skripko, G.A.; Shkadarevich, A.P.; Kondratyuk, N.V.; Urbanovich, V.S.; Nazarenko, P.N. (). C-w and quasi-c-w lasing in Al_(sub2)O_(sub3):Ti^(sup3+) crystals. ZPSBA, vol. 45, no. 4, 1986, 567-573.
5. Mardirosova, I.V.; Bukhalova, G.A.; Ali, M.M. (RISI). The Ce[PO_(sub3)]_(sub3)-RbPO_(sub3) system. IVNMA, no. 10, 1986, 1713-1716.
6. Rez, I.S. (VNITsISPIV). Polyfunctional acentric laser crystals. KVEKA, no. 10, 1986, 2071-2079.
7. Sevast'yanov, B.K.; Remigaylo, Yu.L. (IKAN). Lasing alexandrite in the 20-200 degrees C temperature range. DANKA, vol. 290, no. 1, 1986, 93-97.

b. Ruby

c. LiF

2. Rare Earth

a. Miscellaneous

8. Dotsenko, V.P.; Yermakova, S.V.; Yefryushina, N.P.; Zhikhareva, Ye.A. (FKhI). Study on static energy transfer in yttrium orthoborate activated by holmium and erbium. UFIZA, no. 10, 1986, 1513-1516.
9. Kaminskiy, A.A. (IKAN). Luminescence and stimulated multiwave radiation of Ho³⁺ and Er³⁺ ions in YAlO₃ rhombic crystals. DANKA, vol. 290, no. 5, 1986, 1103-1107.

b. Nd³⁺

10. Garmash, V.M.; Yermakov, G.A.; Lyubchenko, V.M.; Filimonov, A.A. (). Thermal luminescence of neodymium-doped yttrium-aluminum garnet crystals. OPSPA, vol. 61, no. 3, 1986, 537-541.
11. Gondra, A.D.; Shcherbakov, A.A. (). Probability of the radiative decay of ⁴F₅/(₂) and ²H₉/(₂) levels of an Nd³⁺ ion in YAG. ZPSBA, vol. 45, no. 4, 1986, 618-623.
12. Kvapil, J.; Kvapil, Jos.; Perner, B.; Manek, B.; Blazek, K. (). Color centers in Nd³⁺ doped yttrium aluminates (in English). CRTED, no. 3, 1986, 349-352. (RZFZA, 86/9L391).
13. Mak, A.A.; Ustyugov, V.I.; Khaleyev, M.M.; Zakgeym, A.L.; Marakhonov, V.M. (). Amplitude fluctuations of a c-w Nd:YAG laser with light diode pumping. PZTFD, no. 20, 1986, 1258-1263.
14. Marek, J.; Kubeczek, V.; Hamal, K. (). C-w Nd:YAG laser with transfer of its light by optical fiber. JMKOA, no. 3, 1986, 73. (RZRAB, 86/9Yel24).
15. Mierczyk, Z.; Czeszko, J.; Kaczmarek, S. (). YAG:Nd³⁺ laser with a passive Q-switch using F₂(⁻) color center in LiF single crystals. BWATA, no. 3, 1986, 95-107. (RZRAB, 86/9Yel21).

- c. Er³⁺
- d. Ho³⁺

16. Alpat'yev, A.N.; Zharikov, Ye.V.; Kalitin, S.P.; Laptev, V.V.; Osiko, V.V.; Ostroumov, V.G.; Prokhorov, A.M.; Saidov, Z.S.; Smirnov, V.A.; Sorokina, I.T.; Umyakov, A.F.; Shcherbakov, I.A. (IOF). Laser action in holmium ions due to a (sup5)I(sub7) to (sup5)I(sub8) transition at room temperature in an yttrium-scandium-gallium garnet crystal doped with chromium, thulium, and holmium ions. KVEKA, no. 10, 1986, 2127-2129.

17. Kaminskiy, A.A.; Garmash, V.M.; Yermakov, G.A.; Akkerman, V.A.; Filimonov, A.A.; Kurbanov, K. (IKAN). Luminescence and stimulated emission from a rhombic YAlO₃-Ho³⁺ crystal. IVNMA, no. 9, 1986, 1576-1577.

- e. Tm³⁺

3. Semiconductor

- a. Theory

18. Andor, L.; Barta, E.; Csonios, Z.; Hoffmann, Gy.; Koltai, F.; Pfeifer, J.; Puspoki, S.; Radacsi, J.; Serenyi, M. (). Development of semiconductor lasers at the Scientific Research Institute of Technical Physics, Hungarian Academy of Sciences. FNMKA, no. 10-11, 1985, 318-335,350,351,352. (RZRAB, 86/10Yel46).

19. Bezhan, N.P.; Gitsu, D.V.; Ivanov, M.B.; Molodyan, I.P.; Popushoy, V.V.; Syrbu, A.V. (KPI). Investigation of injection laser photosensitive properties by the effective gain method. KVEKA, no. 9, 1986, 1785-1793.

20. Bezhan, N.P.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPI). Dependence of the current of an injection laser on the frequency of external illumination at constant voltage on the p-n junction. MoldNIINTI. Deposit, no. 622-M, 24 Apr 1986, 9 p. (RZFZA, 86/9L970).

21. Gulyayev, Yu.V.; Chusov, I.I.; Yaremenko, N.G.; Nikitchenko, G.V.; Bugayeva, T.V. (). Effect of ultrasound on the spectra of absorption and emission of light in semiconductors. RAEKA, no. 10, 1986, 2095-2098.

22. Korolev, V.N.; Marugin, A.V.; Kharchev, A.V. (GGU). Polarization characteristics of injection semiconductor laser radiation. VINITI. Deposit, no. 5243-V, 17 Jul 1986, 39-45. (RZFZA, 86/10L913).
23. Marugin, A.V.; Kharchev, A.V.; Tsaregradskiy, V.B. (GGU). Frequency fluctuations in semiconductor injection lasers. VINITI. Deposit, no. 5243-V, 17 Jul 1986, 46-49. (RZFZA, 86/10L985).
24. Murzin, V.N.; Chebotarev, A.P. (FIAN). Generation and spectral composition of longwave IR radiation from hot holes in germanium in strong E and H crossed fields. KRSFA, no. 5, 1986, 17-19.
25. Nasibov, A.S.; Pechenov, A.N.; Reshetov, V.I. (). Gradual degradation of e-beam excited A(II)B(VI) semiconductor lasers. CVKFOND, 2nd, Kishinev, 15-16 May 1986. Tezisy dokladov. Part 1. Kishinev, 1986, 77. (RZRAB, 86/10Yel40).
26. Radautsan, S.I.; Maksimova, O.G.; Nikiforov, K.G. (). Development of the physics and chemistry of semiconductors in the Moldavian SSR. IZFMB, no. 3, 1986, 17-29.
27. Sheynkman, M.K.; Korsunskaya, N.Ye. (). Photochemical reactions in A(II)B(VI) semiconductors. Fizika soyedineniy A(^{sup}II)B(^{sup}VI). Moskva, Nauka, 1986, 109-145. (RZFZA, 86/10L312).
28. Shotov, A.P. (). Physical studies on narrowband semiconductors and the development of tunable injection lasers in the IR based on them. VANS, no. 6, 1986, 3-9. (RZFZA, 86/9L966).
29. Suris, R.A.; Tager, A.A. (IRE). Radiation spectrum of a semiconductor laser with an external-cavity resonator. KVEKA, no. 10, 1986, 2085-2095.
30. Vasil'yev, Yu.B.; Ivanov, Yu.L. (FTI). Amplification of light from inversion of Landau levels of light-weight holes in germanium. PZTFD, no. 4, 1986, 250-254.
31. Velichanskiy, V.L.; Zibrov, A.S.; Malakhov, V.I.; Sautenkov, V.A.; Senkov, N.V. (FIAN). Frequency lock-on of a high-power semiconductor laser by radiation from a highly coherent injection laser with an external resonator. KRSFA, no. 5, 1986, 28-30.

32. Wunsche, H.J. (). Equations for modeling semiconductor injection lasers. WZHMA, no. 2, 1986, 109-120. (RZFZA, 86/10L908).
33. Yeliseyev, P.G. (FIAN). Causes and distribution of failures in semiconductor lasers. KVEKA, no. 9, 1986, 1749-1769.
34. Yeliseyev, P.G. (). Nature and statistical distribution of failures in semiconductor lasers. CVKFONDP, 2nd, Kishinev, 15-16 May 1986. Tezisy dokladov. Part 1. Kishinev, 1986, 3-4. (RZRAB, 86/10Yell8).
 - b. Miscellaneous Homojunction
 - c. Miscellaneous Heterojunction
35. Bochkarev, A.E.; Dolginov, L.M.; Drakin, A.Ye.; Druzhinina, L.V.; Yeliseyev, P.G.; Sverdlov, B.N.; Skripkin, V.A. (FIAN). InGaSbAs injection laser emitting at a wavelength of 2.4 μm (300K). KVEKA, no. 10, 1986, 2119-2120.
36. Bogatov, A.P.; Yeliseyev, P.G.; Okhotnikov, O.G.; Rakhval'skiy, M.P.; Khayretdinov, K.A. (FIAN). Optical traveling-wave amplifier utilizing an injection laser diode. KVEKA, no. 9, 1986, 1859-1867.
37. Kurbatov, L.N.; Britov, A.D.; Karavayev, S.M.; Maksimovskiy, S.N.; Sivachenko, S.D.; Starik, P.M.; Lastivka, V.I.; Loyko, N.N. (FIAN). Magnetoplasma injection lasers in the far infrared (approximately 50 μm) based on $[\text{PbSe}]_{0.8}[\text{SnTe}]_{0.2}-\text{PbSe}_{0.32}\text{Te}_{0.68}$ heterostructures. KRSFA, no. 7, 1986, 10-12.
38. Manak, I.S.; Klokova, M.Ye. (). Polarization properties of double heterostructure laser radiation. Impul'snaya fotometriya, no. 9, Leningrad, 1986, 90-92. (RZRAB, 86/9Yel58).
39. Zharnikov, S.D.; Manak, I.S.; Puchin, Yu.V.; Shilov, A.F. (). Effect of temperature on the angular distribution of semiconductor heterolaser radiation. Impul'snaya fotometriya, no. 9, Leningrad, 1986, 92-95. (RZRAB, 86/9Yel59).

- d. GaAs
- e. CdS
- f. ZnSe
- g. $Pb(1-x)Sn(x)Te$
- h. InGaAsP

40. Akimova, I.V.; Drakin, A.Ye.; Yeliseyev, P.G.; Makhsudov, B.I.; Sverdlov, B.N. (). End-face damage during degradation of c-w InGaAsP/InP injection lasers. CVKFOND, 2nd, Kishinev, 15-16 May 1986. Tezisy dokladov. Part 1. Kishinev, 1986, 76. (RZRAB, 86/10Yell2).

41. Prochazkova, O. (). Fabrication and properties of a corrugated laser based on $(Ga,In)(As,P)/InP$ at 1.3 μm (in Czech). ELKCA, no. 4, 1986, 268-274. (RZFZA, 86/10L937).

4. Glass

- a. Miscellaneous
- b. Nd

42. Bayanov, V.I.; Bordachev, Ye.G.; Bolynkin, V.M.; Kryzhanovskiy, V.I.; Mak, A.A.; Motorin, I.V.; Nikonova, M.V.; Serebryakov, V.A.; Starikov, A.D.; Charukhchev, A.V.; Shchavelev, O.S.; Yashin, V.Ye. (). Large-aperture rod amplifiers using phosphate-neodymium glass for high-brightness lasers. KVEKA, no. 9, 1986, 1891-1896.

43. Mak, A.A.; Fromzel', V.A.; Murzin, A.G.; Prilezhayev, D.S. (). Power engineering for solid state lasers: new possibilities and prospects. IANFA, no. 4, 1986, 757-764. (RZRAB, 86/9Yel33).

C. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

44. Arutyunyan, V.M.; Dzhotyan, G.P.; Karmenyan, A.V.; Meliksetyan, T.E.; Aruytyunyan, G.V.; Bagdasaryan, O.V. (). Quasi-waveguide tunable dye laser. IANFA, no. 4, 1986, 633-639. (RZRAB, 86/9Ye201).

45. Burov, L.I.; Gancherenok, I.I. (). Radiation polarization for a liquid laser with an isotropic cavity. OPSPA, vol. 61, no. 4, 1986, 890-892.

46. Hultsch, R.; Czerney, P.; Walkow, F. (). Laser active medium dye lasers. Patent GDR, no. 231180, 18 Dec 1985. (RZRAB, 86/9Yell3).

47. Pashinin, P.P.; Raspopov, S.F.; Sukhodol'skiy, A.T. (IOF). Distributed feedback laser with a "fan-shaped" grating. KRSFA, no. 6, 1986, 24-25.

48. Vashchuk, V.I.; Gorot', K.F.; Kozak, G.Yu.; Malykhina, N.N.; Przhonskaya, O.V.; Tikhonov, Ye.A. (). Polymeric media for lasing in the near infrared spectral region. ZPSBA, vol. 45, no. 4, 1986, 563-567.

b. Rhodamine

49. Barikhin, B.A.; Barkovskiy, K.P.; Gerasimov, V.B.; Dudarevich, A.L.; Kudryavkin, Ye.V.; Naruta, V.Ye.; Nedolugov, V.I.; Orlov, V.K.; Petukhov, A.G.; Ral'chenko, V.I.; Chernomordin, A.I. (). Diffraction divergence dye laser with lamp excitation. ZPSBA, vol. 45, no. 4, 1986, 554-558.

50. Levin, M.B.; Cherkasov, A.S. (). Angular distribution of energy in the radiation of a laser on alcohol and aqueous-micellar solutions of rhodamine 6G with lamp pumping. OPSPA, vol. 61, no. 4, 1986, 866-870.

51. Prokhorenko, V.I.; Tikhonov, Ye.A. (IFANUK). Temporal characteristics of stimulated emission from a traveling wave dye laser with two-photon optical pumping of nanosecond duration. KVEKA, no. 9, 1986, 1848-1858.

c. Polymethine

52. Pyasetskaya, O.V. (). Fourth All-Union Symposium on the Physics and Chemistry of Polymethine Dyes, Zvenigorod, 6-8 June 1985. ZNPFA, no. 3, 1986, 228-229. (RZFZA, 86/9A35).

d. Coumarin

53. Zin'kovskaya, O.V.; Kuznetsova, N.A.; Kaliya, O.L.; Luk'yanets, Ye.A. (). Chemical nature of dark relaxation processes in laser media based on coumarin-47. ZPSBA, vol. 45, no. 3, 1986, 510.

e. Phthalimide

f. Cyanine

g. Xanthene

h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

54. Artyeyev, M.S.; Derzhiiyev, V.I.; Kuznetsov, A.A.; Murav'yev, I.I.; Pozdnyakova, Ye.Ye.; Sulakshin, S.S.; Yakovlenko, S.I.; Yancharina, A.M. (). Parameters of a helium plasma under ion beam pumping. VINITI. Deposit, no. 4571-V, 23 Jun 1986, 14 p. (RZFZA, 86/9G274).

55. Aver'yanov, N.Ye.; Baloshin, Yu.A.; Krylov, K.I. (). Possibility of constructing an automated design system for gas lasers. IVUBA, no. 7, 1986, 70-74. (RZFZA, 86/10L854).

56. Bakayev, D.S.; Yermachenko, V.M.; Kurochkin, V.Yu.; Petrovskiy, V.N.; Protsenko, Ye.D.; Rurukin, A.N.; Shananin, R.A. (MIFI). Manifestation of inertial properties of a medium under the single-mode lasing of gas lasers. KVEKA, no. 10, 1986, 1966-1974.

57. Bakumenko, V.M.; Fesenko, L.D.; Shevrev, A.S.; Yartsev, V.I. (KhGU). Effect of pumping intensity on the character of relaxation processes in molecular lasers. KhGU. Vestnik, no. 285, 1986, 9-10. (RZFZA, 86/10L879).

58. Chernigovskiy, V.V.; Goykhman, V.Kh.; Zyong Nguyen Tkhak (LETI). Gas laser with modulated radiation. OTIZD, no. 44, 1985, 1088627. (RZRAB, 86/9Ye102).
59. Didenko, A.N.; Petrov, V.M.; Slinko, V.N.; Sulakshin, S.S.; Yushkov, Yu.G. (). Parameters of a high-power pulsed microwave discharge plasma in high-pressure gases. VINITI. Deposit, no. 4205-V86, 10 June 1986. (IVUFA, no. 10, 1986, 128).
60. Gordiyets, B.F.; Panchenko, V.Ya. (FIAN; NITsTLAN). Gas lasers with solar excitation. UFNAA, vol. 149, no. 3, 1986, 551-576.
61. Khokhlenko, Yu.L.; Yakimenko, S.N. (KhGU). "Hot band" laser in the IR. KhGU. Vestnik, no. 285, 1986, 5-8. (RZFZA, 86/10L877).
62. Kopay-Gora, A.P.; Mis'kevich, A.I.; Salamakha, B.S. (MIFI). Scrubbing of helium by forced circulation through cooled sorbers in lasers with nuclear pumping. PRTEA, no. 5, 1986, 171-174.
63. Mizeraczyk, J. (). Electron energy distribution function in a high-voltage electric discharge in helium in the laser cathode voltage drop. Zeszyty naukowe Instytutu maszyn przepływowych. PAN Gdansku. Studiumy i matrialy, no. 188, 1984, 30 p. (RZFZA, 86/9L1002).
64. Percak, H. (). Electronic system for mode jumping in gas lasers (in Polish). RZETA, no. 3-4, 1985, 835-839. (RZRAB, 86/9Ye98).
65. Yelagin, V.V.; Lukin, A.Ya.; Fotiadi, A.E. (LPI). Effect of processes at the walls of discharge tubes in ion lasers, on their output characteristics. LPI. Trudy, no. 412, 1985, 70-72. (RZRAB, 86/10Ye54).

2. Simple Mixtures

a. Miscellaneous

66. Grigoryan, Yu.I.; Papanyan, V.O.; Tarasenko, V.F. (IFI; ISE). Electric-discharge He-N₂ laser. KVEKA, no. 10, 1986, 2015-2024.

b. He-Ne

67. Mazan'ko, I.P.; Udal'tsov, B.V.; Tsar'kov, V.A. (). Effect of external electrical circuit capacitance on the reactive oscillations in a He-Ne laser symmetrical discharge. RAEIA, no. 10, 1986, 2042-2045.
68. Popescu, Gh. (). He-Ne laser with an iodine cell. Patent Romania, no. 86596, 30 Apr 1985. (RZRAB, 86/10Ye50).
69. Pruss-Zhukovskiy, S.V.; Senyukov, A.I.; Shishkin, A.I. (LIAP). Perfecting of a compact He-Ne laser for optical information processing systems. LIAP. Sbornik nauchnykh trudov, no. 179, 1985, 141-145. (RZRAB, 86/10Ye51).
70. Shpak, I.V.; Klochko, A.I.; Kostolomov, A.F.; Gudelev, V.G.; Yasinskiy, V.M. (). Effect of the anisotropy of He-Ne laser parameters on the beat frequency of normally polarized waves. OPSPA, vol. 61, no. 3, 1986, 666-668.
71. Troitskiy, Yu.V.; Khanov, V.A. (IAESOAN). Causes of spread in the lasing frequency of lamb-dip stabilized gas lasers. KVEKA, no. 9, 1986, 1920-1922.

c. He-Xe

d. He-Kr

e. Ar-Xe

3. Molecular Beam and Ion

- a. Miscellaneous
- b. Carbon Dioxide
72. Aver'yanov, N.Ye.; Baloshin, Yu.A.; Gromovenko, V.M.; Irtuganov, V.M.; Kalinin, V.P.; Krylov, K.I.; Nikonov, Yu.P.; Pavlishin, I.V.; Shorokhov, O.A.; Yurevich, V.I. (). Periodic pulsed CO₂ laser at atmospheric pressure. IVUBA, no. 5, 1986, 93-96. (RZFZA, 86/9L929).
73. Basov, N.G.; Danilychev, V.A.; Rudoy, I.G.; Soroka, A.M. (). Stimulated scattering of light in the active medium of gas lasers and divergence of their radiation. IANFA, no. 4, 1986, 626-632. (RZFZA, 86/9L938).

74. Dunayev, V.B.; Prokopov, A.P. (). Competition of two waves generated using various transitions by a carbon dioxide laser with a selectively absorbing cell in the cavity. ZPSBA, vol. 45, no. 3, 1986, 391-396.
75. Fedorov, S.V.; Yur'yev, M.S. (). Self-action in pulsed CO₂ lasers as a cause of laser-radiation wave front instability. OPSPA, vol. 61, no. 4, 1986, 895-898.
76. Glushchenko, Yu.V.; Lavrentyuk, V.Ye. (). Preionization of a gas mixture of a CO₂ laser by alpha particles. KVEKA, no. 10, 1986, 2031-2037.
77. Golov, V.K.; Ivanchenko, A.I.; Krasheninnikov, V.V.; Ponomarenko, A.G.; Shepelenko, A.A.; Shulyat'yev, V.B. (). Industrial CO₂ laser with a power of 2.5 kilowatts. IZSTA, no. 10/2, 1986, 87-91. (RZFZA, 86/10L863).
78. Golubchenko, V.P.; Novgorodov, M.Z.; Sobolev, N.N.; Shumskaya, L.I. (FIAN). Single-frequency tunable pulsed TEA-CO₂ laser. KRSFA, no. 9, 1986, 17-19.
79. Makarov, G.N. (ISAN). Dynamic tuning of the frequency of pulsed CO₂ lasers and the obtaining of multiple-peak lasing by means of an intracavity cell containing a gas which absorbs infrared radiation. KVEKA, no. 9, 1986, 1801-1807.
80. Shirokov, Ye.I. (). Calculating the gas paths of periodic pulsed CO₂ lasers. Teplofizika i fiziko-khimicheskikh protsessov v energeticheskikh ustankovakh. Minsk, 1986, 46-48. (RZFZA, 86/10L864).
81. Vasil'yev, A.B.; Spazhakin, V.A. (MGU). Gain distribution by rotational lines in a c-w CO₂ laser. VMUFA, no. 3, 1986, 77-79. (RZRAB, 86/10Ye25).
- c. Carbon Monoxide
82. Deryugin, A.A.; Kotel'nikov, D.S.; Kochetov, I.V.; Loboyko, A.I.; Pal', A.F.; Pichugin, V.V. (IAE). Investigation of heating in a semi-self-maintained discharge in nitrogen and in nitrogen mixed with CO. FIPLD, no. 9, 1986, 1081-1086.
83. Golovin, A.S.; Gurashvili, V.A.; Kochetov, I.V.; Kuz'min, V.N.; Napartovich, A.P.; Pal', A.F.; Pis'menny, V.D.; Pichugin, V.V.; Starostin, A.N.; Turkin, N.G. (IAE). Limiting characteristics of a non-self-sustained discharge in CO laser mixtures. TVYTA, no. 5, 1986, 852-856.

d. Noble Gas

84. Apolonskiy, A.A. (). Influence of coherent effects on light pulses in an actively mode-locked Ar+ laser. OPSPA, vol. 61, no. 4, 1986, 898-900.

85. Basov, N.G.; Danilychev, V.A.; Kholin, I.V. (). Electroionization lasers using electron transitions of inert gas atoms. IANFA, no. 4, 1986, 779-785. (RZFZA, 86/9L922).

e. Nitrogen

f. Iodine

g. Hydrogen

h. Ammonia

i. Carbon Tetrafluoride

j. Nitrous Oxide

k. Water Vapor

l. Heavy-Water Vapor

m. Submillimeter

86. Yefremov, V.A.; Dyubko, S.F. (KhGU). Amplification of a trial wave in a four-wave quantum system under two-photon pumping. KhGU. Vestnik, no. 285, 1986, 3-5. (RZFZA, 86/10Zh16).

n. Metal Vapor

87. Bokhan, P.A. (ITF). Relaxation processes and the influence of metastable states of metal atoms and ions on the mechanism of stimulated emission and on energy characteristics of lasers. KVEKA, no. 9, 1986, 1837-1847.

o. Gasdynamic

88. Achasov, O.V.; Ragozin, D.S. (ITMO). Constants of vibrational energy exchange in the active media of CO₂ gasdynamic lasers with additions of O_(sub2), H_(sub2), H_{(sub2)O} and CO. ITMO. Preprint, no. 16, 1986, 52 p. (RZFZA, 86/9L941).
89. Akulintsev, V.M.; Glasenkov, V.M.; Gorshunov, N.M.; Myasnikov, A.Yu.; Neshchimenko, Yu.P.; Shcherbo, A.B. (MIFI). Investigation of a H_(sub2)-HCl gas dynamic laser active medium in an anharmonic approximation. KVEKA, no. 10, 1986, 2102-2108.
90. Bel'dyugin, I.M.; Vysotskiy, Yu.P.; Stepanov, A.A.; Shcheglov, V.A. (FIAN). Supersonic variant of a H_(sub2)-I laser with an electroionization method of excitation. KRSFA, no. 8, 1986, 9-12.
91. Kirmusov, I.P.; Starik, A.M. (). Experimental realization of lasing in a gasdynamic laser using a mixture of H_(sub2)-HCl. Neravnovesnye techeniya gaza s fiziko-khimicheskogo prevrashcheniya. Moskva, 1985, 26-48. (RZFZA, 86/9L940).
92. Lyashko, I.I.; Molodtsov, O.I.; Sukhenko, V.P. (). Effect of gasdynamic flow mixing on electron-chemical relaxation processes (in Ukrainian). DUKAB, no. 10, 1986, 27-30.
93. Trusov, V.P.; Chumakov, B.N. (). Investigation of properites of an unstable resonator with a dihedral corner reflector in a gas dynamic laser. KVEKA, no. 9, 1986, 1914-1917.

4. Excimer

94. Basov, N.G.; Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Samarin, A.Yu.; Tamanyan, G.Yu. (FIAN). Investigation of an ultraviolet laser utilizing an XeF* molecule and with pumping by excimer radiation. KVEKA, no. 9, 1986, 1808-1814.
95. Bunkin, F.V.; Derzhiyev, V.I.; Yurovskiy, V.A.; Yakovlenko, S.I. (IOF). Simulation of an exciplex laser active medium based on argon hydride. KVEKA, no. 9, 1986, 1828-1836.
96. Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Samarin, A.Yu.; Tamanyan, G.Yu. (FIAN). Kinetics of formation and quenching of Xe_(sub2)F* molecules under excimer radiation pumping. KVEKA, no. 10, 1986, 2117-2119.

97. Didenko, A.N.; Petrov, V.M.; Slin'ko, V.N.; Sulakshin, A.S.; Sulakshin, S.S. (NIIYaFT). Excimer laser excited by a heavy-current relativistic microwave generator. PZTFD, no. 20, 1986, 1245-1249.
98. Regulich, V.S.; Starodub, V.P.; Shevera, V.S. (). Radiation from excimers in a plasma jet. PZTFD, no. 10, 1986, 606-609.
99. Vill, A.A.; Zhil'tsov, V.I.; Klementi, T.I.; Kruusimyagi, T.E.I.; Mnuskin, V.Ye.; Nikiforov, V.G.; Rayk, Yu.B.; Trinchuk, B.F.; Fomin, V.V. (TsNIIE). LGI-509 pulsed excimer laser. PRTEA, no. 5, 1986, 244-245.

5. Dye Vapor

D. CHEMICAL LASERS

1. Miscellaneous

100. Bashkin, A.S.; Gamzatov, N.M.; Podmar'kov, Yu.P.; Porodinkov, O.Ye.; Orayevskiy, A.N. (FIAN). Numerical and experimental investigations of energy potentialities of an OD(OH)-CO₂ chemical laser. KVEKA, no. 10, 1986, 1999-2008.
101. Fedotov, V.G. (IKhF). vibrationally excited CS radicals in a flame of fluorine with methyl methacrylate. KHFID, no. 10, 1986, 1416-1420.
102. Kochelap, V.A.; Mel'nikov, L.Yu. (IPANUk). C-w molecular chemical lasers in the visible range with mixing of the reagent jets. UFIZA, no. 9, 1986, 1329-1333.

2. Fluorine + Hydrogen (Deuterium)

103. Bashkin, A.S.; Khoroshilov, Ye.V. (FIAN). Study on the possibility of improving the divergence of radiation from a pulsed chemical photoinitiated D₂-F₂ laser with a 6-liter active volume. FIAN. Preprint, no. 190, 1986, 17 p. (RZRAB, 86/10Ye65).
104. Basov, N.G.; Gavrikov, V.F.; Zolotarev, V.A.; Katorgin, B.I.; Kryukov, P.G.; Frolov, M.P.; Shcheglov, V.A.; Yuryshev, N.N. (FIAN). Pulsed chemical HF laser in the visible range. Design of the experiment. FIAN. Preprint, no. 174, 1986, 19 p. (RZFZA, 86/10L873).

3. Photodissociation

4. Transfer

5. Oxygen + Iodine

105. Zagidullin, M.V.; Zaikin, A.P.; Igoshin, V.I.; Kupriyanov, N.L. (FIAN). Dynamics of pulsed lasing in a chemical oxygen-iodine laser. FIAN. Preprint, no. 151, 1986, 21 p. (RZFZA, 86/10L872).

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Oxygen

E. COMPONENTS

1. Miscellaneous

2. Resonators

a. Design and Performance

106. Androsov, V.P.; Vertiy, A.A.; Veliyev, E.I.; Kuz'michev, I.K. (). Study on the spatial distribution of a transversely polarized field in an open resonator. RAELA, no. 3, 1986, 565-571.

107. Burakov, S.D.; Godlevskiy, A.P. (). Effect of sorption processes at the surface of resonator mirrors on the lasing kinetics of lasers. Tomskiy filial SOAN. Preprint, no. 8, 1986, 24 p. (RZRAB, 86/10Ye345).

108. Ishchenko, Ye.F.; Novik, A.Ye.; Sokolov, A.L. (MEI). Polarization characteristics of resonators with a longitudinal magnetic field. MEI. Nauchnyye trudy, no. 60, 1985, 112-116. (RZRAB, 86/9Ye536).

109. Kravchenko, V.I.; Parkhomenko, Yu.N.; Sokolov, V.A. (IFANUK). Selectivity of dispersive resonators with arbitrarily located focusing and diaphragming elements. KVEKA, no. 10, 1986, 2038-2043.

110. Lyubimov, V.V. (). Influence of pumping in excess of threshold on losses of open resonators with tilted mirrors. KVEKA, no. 9, 1986, 1933-1935.

111. Popescu, I.M.; Stefanescu, E.N.; Sterian, P.E. (). Semiclassical analysis of an optical bistable Fabry-Perot resonator (in English). RRPQA, no. 3, 1986, 221-235. (RZRAB, 86/10Ye347).

112. Rohlicek, F.; Kvapil, J.; Synecek, J. (). Excitation resonator for a neodymium or ruby laser. Author's certificate Czechoslovakia, no. 221579, 15 Feb 1986. (RZRAB, 86/9Ye541).

113. Sushkin, V.N. (MEI). Sensitivity of multi-mirror stable optical resonators to misalignment. MEI. Nauchnyye trudy, no. 60, 1985, 130-133. (RZRAB, 86/9Ye538).

114. Verbitskiy, V.P.; Gnatovskiy, A.V.; Shpak, M.T. (). Polarization characteristics of radiation from a laser with an amplitude isotropic resonator. DUKAB, no. 6, 1986, 51-54. (RZFZA, 86/10L999).

115. Volkova, Ye.A.; Kandidov, V.P. (). Stability of a wave beam in a nonlinear ring resonator. IANFA, no. 4, 1986, 804-807. (RZFZA, 86/9L1016).

116. Voronko, A.I.; Klimova, L.G.; Shkerdin, G.N. (). Multistable excitation of channeled surface polaritons in a nonlinear resonator. FTVTA, no. 4, 1986, 1076-1081. (RZFZA, 86/9L1018).

b. Mode Kinetics

117. Belkina, Ye.M.; Klochan, Ye.L.; Lariontsev, Ye.G. (NIIYaF). Amplitude characteristics of an actively mode-locked solid-state ring laser. KVEKA, no. 9, 1986, 1902-1908.

118. Danileyko, N.M.; Yatsenko, L.P. (). Frequency-modulation resonances in the emission of ring lasers with intracavity nonlinear absorption. OPSPA, vol. 61, no. 4, 1986, 861-865.

119. Gulin, A.V.; Ramazanova, G.S. (MEI). Selection of transverse modes in a resonator with Gaussian diaphragms. MEI. Nauchnyye trudy, no. 60, 1985, 117-125. (RZRAB, 86/9Ye537).

120. Kocharovskaya, O.A. (GGU). Mechanism of active mode locking in resonant media with a split level. VINITI. Deposit, no. 5243-V, 17 Jul 1986, 92-96. (RZFZA, 86/10L1009).

121. Kocharovskaya, O.A.; Tsaregradskiy, V.B. (GGU). Synchronization of lasers by polarization of the pumping of the active atoms. VINITI. Deposit, no. 5243-V, 17 Jul 1986, 59-63. (RZFZA, 86/10L1013).

122. Korolenko, P.V.; Makarov, V.G.; Stepina, S.A. (MGU). Analysis of intracavity fields in multipass mode lasers. VINITI. Deposit, no. 3331-V, 8 May 1986, 45 p. (RZFZA, 86/9L1010).
123. Kovalenko, Ye.S.; Mandel', A.Ye.; Savitskiy, V.K. (). Active mode locking in solid-state oscillators with intracavity selectors. VINITI. Deposit, no. 2573-V86, 09 April 1986. (IVUFA, no. 9, 1986, 126).
124. Solomko, A.A.; Gayday, Yu.A.; Dovzhenko, A.V.; Antonishin, M.V.; Yanishevskiy, A.T. (). Transformation of optical wave modes in gyroanisotropic planar waveguides. OPSPA, vol. 61, no. 3, 1986, 606-610.

3. Pump Sources

125. Apollonov, V.V.; Baytsur, G.G.; Prokhorov, A.M.; Firsov, K.N. (IOF). Formation of a volumetric self-sustained discharge for gas laser pumping in a system of compact electrodes. KVEKA, no. 10, 1986, 1960-1962.
126. Basov, N.G.; Danilychev, V.A.; Dolgikh, V.A.; Kapustin, V.V.; Kerimov, O.M.; Malinovskiy, A.L.; Myznikov, Yu.F.; Rudoy, I.G.; Soroka, A.M. (FIAN). Possibility of developing an electroionization hydrogen lamp in the vacuum UV. PZTFD, no. 10, 1986, 628-632.
127. Dul'nev, G.N.; Mikhaylov, A.Ye.; Parfenov, V.G.; Savintseva, L.A. (). Effect of the design of a laser pumping system on the heat conditions and performance of the laser. IVUBA, no. 6, 1986, 76-80. (RZRAB, 86/10Ye365).
128. D'yakonov, V.P.; Gruden', M.N.; Ziyenko, S.I.; Smerdov, V.Yu. (MEISF). Pulsed power supply for semiconductor injection lasers. PRTEA, no. 5, 1986, 7-18.
129. D'yakonov, V.P.; Smerdov, V.Yu.; Adamov, P.G.; Pak, G.T. (MEISF). Generator of paired nanosecond pulses of flow. PRTEA, no. 5, 1986, 98-99.
130. Gurevich, D.B.; Kanatenko, M.A.; Podmoshenskiy, I.V. (). Spectrum analysis of a nanosecond self-sustained volumetric discharge at atmospheric pressure [efficient for laser pumping]. ZPSBA, v. 44, no. 6, 1986, 908-915.

131. Hempel, L. (). Adjustable drive for optical precision instruments. Patent GDR, no. 232562, 29 Jan 1986. (RZRAB, 86/9Ye572).
132. Kovalev, A.S.; Nazator, A.I.; Rakhimov, A.T.; Suetin, N.V.; Feoktistov, V.A. (NIIYaF). Numerical study of high-frequency discharges used for excitation of waveguide lasers. FIPLD, no. 10, 1986, 1264-1268.
133. Krasnikov, Yu.I.; Malov, A.N. (ITPM). Compact stabilized 5-kilowatt power supply for periodic pulsed gas lasers. PRTEA, no. 5, 1986, 135-138.
134. Nolte, L.; Roselt, U.; Poehler, M. (). Method and device for fabricating a transversal corrugated or ribbed inner tube of a double-walled special discharge tube with high angular selectivity. Patent GDR, no. 233747, 12 Mar 1986. (RZRAB, 86/10Ye70).
135. Skakun, V.S.; Tarasenko, V.F.; Fedenev, A.V.; Fomin, Ye.A.; Shpak, V.G. (). Using small-scale electron accelerators to pump Penning neon plasma lasers. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Part 3. Tomsk, 1986, 89-91. (RZRAB, 86/9Ye562).
136. Vintizenko, L.G.; Gushenets, V.I.; Koval', N.N.; Kreyndel', Yu.Ye.; Skakun, V.S.; Tarasenko, V.F.; Tolkachev, V.S.; Fedenev, A.V.; Chagin, A.A.; Shchanin, P.M. (). Accelerator with a plasma cathode to pump lasers at atomic transitions of inert gases. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Part 3. Tomsk, 1986, 92-94. (RZRAB, 86/9Ye563).

4. Cooling Systems

137. Westphal, K.; Kilz, I. (). Circuit in a laser module [with a cooling device]. Patent GDR, no. 234949, 16 Apr 1986. (RZRAB, 86/10Ye369).

5. Deflectors

138. Dokuchayev, V.I. (KNIKIPO). Device for two-coordinate deflection of a beam. OTIZD, no. 9, 1986, 1216755. (RZRAB, 86/10Ye169).
139. Korotayev, Yu.A. (). Kinematics of a mirror deflector. IVUBA, no. 7, 1986, 67-69. (RZFZA, 86/10L661).

140. Leparskiy, V.Ye. (). Experimental recording of space charges in an electrooptic deflector in an inhomogeneous field. Kovariantnye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 96-100. (RZRAB, 86/10Ye168).

141. Vasil'yev, Yu.G.; Kuptsov, A.D.; Ryzhevnin, V.N. (). Calculation of light decoupling between channels of an acoustooptic deflector. RATEA, no. 6, 1986, 81-83. (RZRAB, 86/9Ye241).

142. Vorob'yev, A.A.; Katayev, I.G. (). Light scanning by an inclined face of a straight triangular prism consisting of crystals of 3m, 4mm and 43m symmetry. IVUZB, no. 5, 1986, 74-76. (RZFZA, 86/10L653).

6. Attenuators

7. Collimators

8. Diffraction Gratings

143. Vaytkus, Yu.Yu.; Pranaytis, R.V.; Yarashyunas, K.Yu. (VilGU). Dynamics of a diffraction grating utilizing free charge carriers in an external electric field. KVEKA, no. 9, 1986, 1868-1874.

9. Focusers

144. Soroka, J. (). System for focusing radiation from a linear source, in particular for photochemical reactors and lasers. Patent Poland, no. 129528, 15 Mar 1986. (RZRAB, 86/9Ye576).

145. Yepishin, V.A.; Maslov, V.A.; Ryabykh, V.N.; Svirch, V.A.; Topkov, A.N. (KhGU). Device for focusing of submillimeter beams. OTIZD, no. 41, 1985, 1190338. (RZFZA, 86/9G315).

10. Windows

11. Polarizers

146. Arkhipov, M.V.; Pavlov, S.V.; Ryazanov, N.S. (LGU). Polarization of radiation from multifrequency pulsed lasers with isotropic cavities. KVEKA, no. 9, 1986, 1928-1930.

147. Arkhipov, M.V.; Pavlov, S.V.; Ryazanov, N.S. (NIIFL). New method of intracavity modulation of laser radiation polarization. KVEKA, no. 10, 1986, 1964-1965.

148. Volkov, A.A.; Gorshunov, B.P.; Kozlov, G.V.; Pettelt, Ya.; Yakobsen, K.S. (IOF). Electromagnetic radiation polarizer based on a quasi-one-dimensional conductor. KRSFA, no. 10, 1986, 42-44.

12. Beam Shapers

13. Lenses

149. Jahn, R.; Tautz, V. (). Lens for optical scanning. Patent GDR, no. 234950, 16 Apr 1986. (RZRAB, 86/10Ye368).

150. Voytenko, I.G.; Pekhterev, A.V. (). Geodesic lenses for integrated optics devices. VBSFA, no. 3, 1986, 92-94. (RZFZA, 86/10L624).

14. Filters

151. Bulgakov, A.A.; Kovtun, V.R. (IRFEANUK). Narrowband filter. OTIZD, no. 7, 1986, 1213458. (RZRAB, 86/10Ye547).

152. Lupashkov, Ye.A.; Ovcharenko, A.P.; Shklyarevskiy, I.N. (). Cut-off filters matched with a narowband transmission filter. OPSPA, v. 60, no. 4, 1986, 831-834.

153. Suslikov, L.M.; Gad'mashi, Z.P.; Slivka, V.Yu. (). Angular dispersion of the spectral parameters of optical filters using gyrotropic crystals with an "isotropic" point. UFIZA, no. 4, 1986, 531-538. (RZFZA, 86/10L630).

154. Vinogradova, T.A.; Kuznetsov, B.V. (GOI). The IPF-6 interference polarization filter. OPMPA, no. 4, 1986, 28-30.

15. Beam Splitters

155. Abgaryan, A.A.; Toporov, V.I.; Khatyrev, N.P. (). Acoustooptic measuring beam splitter of laser radiation. IZTEA, no. 10, 1986, 20-21.

16. Mirrors

156. Gavrikov, V.F.; Piskunov, A.K.; Shcheglov, V.A. (FIAN). The use of conical mirrors in laser units. KVEKA, no. 10, 1986, 2135-2137.

157. Karasik, V.Ye. (MEI). Spatial frequency analysis of laser radiation retroreflectors. MEI. Nauchnyye trudy, no. 60, 1985, 138-143. (RZRAB, 86/9Ye744).

17. Detectors

158. Beckert, H. (). Input circuit for modulated optical signals. Patent GDR, no. 229255, 30 Oct 1985. (RZRAB, 86/9Ye550).
159. Belov, M.L.; Orlov, V.M. (). Optimal shape for a photodetector. OPSPA, v. 60, no. 2, 1986, 404-406.
160. Bychkov, S.I.; Rumyantsev, K.Ye. (). Optimization of the parameters of a dissector system to search for pulsed radiation sources. IVUZB, no. 5, 1986, 12-18. (RZFZA, 86/9zh87).
161. Gorlin, G.B.; Kasymov, Sh.S.; Paritskiy, L.G.; Tisnek, T.V. (FTI). Infrared radiation photorecorder. PRTEA, no. 5, 1986, 244.
162. Khotyaintsev, V.N.; Andreyev, V.A.; Kuznetsov, I.M.; Bortsov, V.B. (). Recording of multimode Gaussian beams by a photodetector. OPSPA, v. 60, no. 4, 1986, 852-855.
163. Kozlovskiy, Yu.Ya.; Neustroyev, L.N.; Osipov, V.V. (GOI). Coherent detection of laser radiation with a fluctuating phase. OPMPA, no. 9, 1986, 1-3.
164. Kozlovskiy, Yu.Ya.; Neustroyev, L.N. (GOI). Theory of coherent detection of images. OPMPA, no. 4, 1986, 1-4.
165. Kuznetsova, Ye.M. (GOI). Effect of the correlation of the intensity of light on the signal to noise ratio of a detector. OPMPA, no. 10, 1986, 44-46.
166. Solomatin, V.A.; Yakushenkov, Yu.G. (MIIGAiK). Comparison of various methods for determining the coordinates of images by means of multielement radiation detectors. IVUBA, no. 9, 1986, 62-69.
167. Spitzel, R.; Richter, J. (). Detecting circuit for optical pulses. Patent GDR, no. 230124, 20 Nov 1985. (RZRAB, 86/9Ye548).

18. Modulators

168. Antonov, S.N.; Zil'berman, G.Ye.; Kupchenko, L.F.; Proklov, V.V.; Zhukov, S.S. (IRE). Method for modulating optical radiation. OTIZD, no. 9, 1986, 1216757. (RZRAB, 86/10Ye167).
169. Dittmar, G.; Behlert, R.; Dittmar, Gis.; Berndt, K. (). Compact circuit to modulate polarized radiation. Patent GDR, no. 231170, 18 Dec 1985. (RZRAB, 86/9Ye222).
170. Gruzinskiy, V.V.; Suchkov, V.A. (IFANB). Method for controlling radiation. OTIZD, no. 11, 1986, 1034567. (RZRAB, 86/9Ye227).
171. Gyunashyan, K.S.; Papyan, V.A.; Sagatelyan, M.K. (). Microwave modulators of light, with spaced crystals. IAAFA, no. 3, 1986, 24-27. (RZFZA, 86/10L657).
172. Heumann, E.; Schastak, S. (). Method for shaping a nearly rectangular intensity profile of high-power laser pulses. Patent GDR, no. 231902, 8 Jan 1986. (RZRAB, 86/10Ye379).
173. Kopylov, Yu.L.; Kravchenko, V.B.; Kucha, V.V.; Sidorenko, V.S.; Chikina, L.O. (). Electrooptic light modulation in Bi₁₂SiO₂₀ crystals. RAELA, no. 3, 1986, 593-601.
174. Mierczyk, Z.; Kaczmarek, S.; Czeszko, J. (). Effect of the design parameters of a passive Q-switch in a YAG:Nd³⁺ laser resonator, on its lasing characteristics. BWATA, no. 4, 1986, 64-67. (RZFZA, 86/9L1024).
175. Nikolayev, V.A.; Shpilevoy, B.N.; Yuzhakov, A.N.; Yakushev, A.K. (NIIIPFP). Device for controlling the position of control elements. OTIZD, no. 15, 1986, 1226413. (RZRAB, 86/10Ye380).
176. Weis, M.; Kneppo, I. (). Integrated wideband electrooptic modulator with a traveling wave. Author's certificate Czechoslovakia, no. 226647, 15 Feb 1986. (RZRAB, 86/9Ye228).
177. Zartov, G.D.; Peyeva, R.A.; Panayotov, K.P. (). Bistable action of an electrooptic modulator tuned by incident light wavelength (in English). CRABA, no. 3, 1986, 45-48. (RZRAB, 86/10Ye166).

F. NONLINEAR OPTICS

1. General Theory

178. Adonts, G.G. (). Induced rotation of the polarization plane of light under single- and two-photon resonance conditions. OPSPA, v. 60, no. 3, 1986, 573-577.
179. Aktsipetrov, O.A.; Baranova, I.M.; Kulyuk, L.L.; Petukhov, A.V.; Arushanov, E.K.; Shtanov, A.A.; Shutov, D.A. (MGU). Nonlinear optical electroreflection in cadmium phosphide. FTVTA, no. 10, 1986, 3228-3230.
180. Alekseyev, A.I.; Beloborodov, V.N. (MIFI). Ultrahigh resolution echo spectroscopy in the presence of a strong magnetic field. ZETFA, v. 90, no. 6, 1986, 1995-2006.
181. Arutyunyan, G.M. (NIIFKS). Optical bistability and nondegenerate wave front reversal in semiconductors. FTPPA, no. 10, 1986, 1758-1763.
182. Arutyunyan, G.M. (). Hysteresis in the optical characteristics of two-band semiconductors. IAAFA, no. 2, 1986, 70-74. (RZFZA, 86/10L996).
183. Bakasov, A.A.; Bogolyubov, N.N.; Shumovskiy, A.S.; Yukalov, V.I. (OIVaI). Kinetics of two-photon radiation in the case of damping polarization. OIVaI. Preprint, no. R17-86-74, 1986, 22 p. (RZFZA, 86/9L856).
184. Bel'dyugin, I.M.; Stepanov, A.A.; Shcheglov, V.A. (FIAN). Derivation of equations of degenerate two-wave interaction, allowing for the transient response of the resonance medium. KRSFA, no. 9, 1986, 40-42.
185. Borshch, A.A.; Brodin, M.S.; Semioshko, V.N. (). Anisotropy of refraction nonlinearity in wideband semiconductors and its use for controlling the parameters of laser beams. IANFA, no. 4, 1986, 736-744. (RZFZA, 86/10L1000).
186. Brazovskaya, N.V. (API). Functional linearization in problems of nonlinear optics. VINITI. Deposit, no. 3775-V, 26 May 1986, 11 p. (RZFZA, 86/9L852).
187. Brodskiy, A.M. (). Nonlinear optics of a metal surface (in English). PSSBB, v. B134, no. 1, 1986, 251-256. (RZFZA, 86/10L1116).

188. Bunkin, F.V.; Kravtsov, Yu.A.; Lyakhov, G.A. (IOF). Acoustic analogs of nonlinear optical phenomena. UFNAA, v. 149, no. 3, 1986, 391-411.
189. Derbov, V.L.; Mel'nikov, L.A.; Novikov, A.D. (SGU). Theory of narrow resonances in saturable absorption of Gaussian beams, allowing for induced inhomogeneity in the medium. VINITI. Deposit, no. 5315-V, 21 Jul 1986, 37 p. (RZFZA, 86/10L1082).
190. Derbov, V.L.; Novikov, A.D.; Potapov, S.K. (SGU). Calculating the shape of nonlinear absorption and dispersion resonances at degenerate Doppler broadened transitions in a strong light field. VINITI. Deposit, no. 5303-V, 21 Jul 1986, 29 p. (RZFZA, 86/10L802).
191. Dneprovskiy, V.S. (). Resonant dynamic nonlinearity and optical bistability in layered semiconductors. IANFA, no. 4, 1986, 661-669. (RZFZA, 86/9L1037).
192. Gutsaki, V.N.; Dudkin, V.I.; Petrun'kin, V.Yu.; Semenov, V.V. (). Nonlinear interaction of two radio frequency fields with optically oriented atoms. RAELA, no. 9, 1986, 1866-1867.
193. Katanayev, I.I. (LGU). Sub-Poisson statistics and anti-grouping of photons in secondary glow from impurity centers. VINITI. Deposit, no. 29NB-V, 22 Apr 1986, 7 p. (RZFZA, 86/9L1073).
194. Kazantsev, A.P.; Chudesnikov, D.O.; Yakovlev, V.P. (MIFI; ITFL). Hysteresis in a two-level system and frictional force in a standing light wave. ZETFA, v. 90, no. 5, 1986, 1619-1634.
195. Khizhnyakov, V.; Rozman, M. (). Quantum change in the polarization of light by collective orientation of atoms. ETFMB, no. 2, 1986, 190-192. (RZFZA, 86/10L804).
196. Kochetov, Ye.A. (OIYaI). Exact solutions in problems on the interaction between two-level systems and radiation. OIYaI. Preprint, no. 12, 1985, 41-47. (RZFZA, 86/10L819).
197. Kolovskiy, A.R. (). Interaction of radiation with a multilevel nonlinear quantum system in the presence of relaxation processes. OPSPA, vol. 61, no. 4, 1986, 700-704.

198. Kumekov, S.Ye. (DzhTILPP). Energy distribution of electrons under intraband absorption of monochromatic radiation. FTPPA, no. 4, 1986, 687-691.
199. Kuz'min, V.S. (). Oscillating induction and echo signals in inhomogeneously broadened media. ZPSBA, v. 44, no. 3, 1986, 474-480,455.
200. Lisitsa, M.P.; Yaremko, A.M. (). Effects of anharmonism and nonlinearity in vibrational exciton and polariton spectra of molecular crystals. Fizika molekulyarnykh kristallov. IFANUK. Kiyev, Naukova dumka, 1986, 33-48. (RZFZA, 86/10L365).
201. Lyaptsev, A.V.; Zuyev, A.N. (). Zeeman structure of the spectrum of an atom in a strong resonant monochromatic electromagnetic field. OPSPA, v. 60, no. 4, 1986, 687-693.
202. Mayyer, A.A. (IOF). Theory of self-switching radiation in tunnel-coupled waveguides. KRSFA, no. 9, 1986, 43-45.
203. Movsesyan, M.Ye.; Ovakimyan, T.O.; Shmavonyan, S.V. (). Stimulated processes in a rubidium-vapor and buffer-gas mixture under two-photon excitation. OPSPA, vol. 61, no. 3, 1986, 454-456.
204. Nerkararyan, Kh.V. (). Optical nonlinearity in the exciton spectrum region of semiconductors. FTPPA, no. 7, 1986, 1318-1320. (RZFZA, 86/10N419).
205. Nerkararyan, Kh.V. (). Interrelated two-level systems in a resonant electromagnetic field. IAAFA, no. 2, 1986, 75-79. (RZFZA, 86/10L839).
206. Orayevskiy, A.N.; Protsenko, I.Ye. (). Explosive absorption of radiation. IANFA, no. 4, 1986, 715-723. (RZFZA, 86/9L879).
207. Rautian, S.G.; Safonov, V.P.; Chernobrod, B.M. (). Cooperative scattering of light. IANFA, no. 4, 1986, 640-646. (RZFZA, 86/9L853).
208. Reznikov, Yu.A.; Reshetnyak, V.Yu. (). Photoinduced impurity molecules in nematic liquid crystals. Fizika molekulyarnykh kristallov. Kiyev, 1986, 193-205. (RZFZA, 86/9I191).
209. Semenov, Yu.G. (IPANUK). Optical bistability of magnetomixed semiconductors during resonant excitation of band states. FTPPA, no. 10, 1986, 1829-1834.

210. Stoychev, K.T. (). Nonlinear optical susceptibilities of molecular crystals in the region of vibronic excitations. Part 3. Non-totally symmetric vibrations (in English). PSSBB, v. B133, no. 2, 1986, 557-562. (RZFZA, 86/10L1032).

211. Vardanyan, R.S.; Khachatryan, A.Kh. (). Nonlinear problem of polychromatic scattering under general laws governing redistribution by frequency. IAAFA, no. 2, 1986, 93-96. (RZFZA, 86/9L27).

212. Varnavskiy, O.P.; Golovlev, V.V.; Kirkin, A.N.; Leontovich, A.M.; Malikov, R.F.; Mozharovskiy, A.M.; Trifonov, Ye.D. (). Coherent amplification in activated crystals. IANFA, no. 4, 1986, 647-653. (RZFZA, 86/9L857).

213. Vaytkus, Yu.; Gaubas, E.; Kulevichyus, Ch. (). Nonlinear refraction of two-dimensional laser beams in semiconductors. LFSBA, no. 3, 1986, 363-367. (RZRAB, 86/10Ye483).

214. Veklenko, B.A. (). Raman absorption by an impurity in a multiphoton field in a dispersive medium. IVUFA, no. 2, 1986, 78-82. (RZFZA, 86/9L868).

215. Veksler, V.I. (). New mechanism of the two-photon process for forming a continuous spectrum of optical radiation emitted by secondary emission products of atomic particles. FTVTA, no. 6, 1986, 1910-1913. (RZFZA, 86/10L128).

216. Zakharova, I.G.; Karamzin, Yu.N.; Trofimov, V.A. (IPM). Numerical method for problems on the propagation of light pulses in inhomogeneous moving nonlinear absorbing media. IPM. Preprint, no. 22, 1986, 18 p. (RZFZA, 86/10L1083).

217. Zaskal'ko, O.P.; Zozulya, A.A.; Panaioti, N.N. (FIAN). "Self-bleaching" of linearly absorbing media in opposed light waves. KRSFA, no. 4, 1986, 12-14. (RZFZA, 86/10L1037).

218. Zharova, N.A.; Litvak, A.G.; Petrova, T.A.; Sergeyev, A.M.; Yunakovskiy, A.D. (IPF). Multiple splitting of wave structures in nonlinear media. ZFPRA, v. 44, no. 1, 1986, 12-15.

2. Frequency Conversion

219. Abdullayev, A.G.; Agal'tsov, A.M.; Gorelik, V.S.; Ibragimov, T.D. (FIAN). Temperature dependence of the second optical harmonic in a $TlInS_{(sub2)}$ crystal. KRSFA, no. 5, 1986, 14-16.
220. Arutyunyan, V.M.; Muradyan, A.Zh.; Oganesyan, M.K.; Papazyan, T.A.; Khachatryan, R.Zh. (). Investigation of the frequency dependence of an optical pumping transformation process under two-photon resonance conditions. ZPSBA, vol. 45, no. 3, 1986, 510.
221. Garmash, V.M.; Lemeshko, V.V.; Obukhovskiy, V.V.; Pavlova, N.I.; Rez, I.S. (KGU). Twinning of potassium titanate-phosphate crystals [for second harmonic generation]. UFIZA, no. 9, 1986, 1410-1414.
222. Garmash, V.M.; Yermakov, G.A.; Pavlova, N.I.; Tarasov, A.V. (). Efficient generation of secondary harmonics in crystals of potassium-titanate-phosphate in a noncritical synchronistic mode. PZTFD, no. 20, 1986, 1222-1225.
223. Kazak, N.S.; Lugina, A.S.; Miklavskaya, Ye.M.; Nadenenko, A.V.; Pavlenko, V.K.; Sannikov, Yu.A. (). Frequency conversion of diverging laser beams under vector synchronism. Kovariantnyye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 88-95. (RZRAB, 86/10Ye21).
224. Kondratenko, P.S. (VNIIIOFI). Second-harmonic generation upon exposure of a periodically profiled metal surface to light. KVEKA, no. 10, 1986, 2009-2014.
225. Markin, A.S.; Ryabenkov, V.I.; Tusnov, Yu.I. (). Using nonlinear materials to obtain [second harmonic] subnanosecond pulses. Fizika dielektricheskikh materialov. MIREA. Moskva, 1985, 168-178. (RZFZA, 86/9L1051).
226. Nersisyan, M.N.; Pogosyan, P.S.; Saakyan, L.V. (). Radiation from a nonlinear boundary under difference frequency generation. DANAA, no. 5, 1985, 223-227. (RZFZA, 86/9L1054).
227. Pinkevich, I.P.; Reshetnyak, V.Yu. (). Scattering of light into the second harmonic in nematic liquid crystals. UFIZA, no. 5, 1986, 666-672. (RZFZA, 86/9I190).

228. Zabolotskaya, Ye.A. (FIAN). Second harmonic generation from a transverse wave in a Gaussian beam in an isotropic solid. KRSFA, no. 6, 1986, 16-17.

3. Parametric Processes

229. Begishev, I.A.; Gulamov, A.A.; Yerofeyev, Ye.A.; Kamalov, Sh.R.; Redkorechev, V.I.; Usmanov, T. (IEANUz). Full pump energy conversion into a subharmonic wave under parametric signal amplification. KVEKA, no. 10, 1986, 1959-1960.

230. Kiseleva, I.N.; Obukhovskiy, V.V.; Odulov, S.G. (KGU). Holographic-type parametric scattering in 3m class crystals. FTVTA, no. 10, 1986, 2975-2980.

231. Krasnikov, V.V.; Pshenichnikov, M.S.; Solomatin, V.S. (MGU). Parametric conversion under conditions of two-photon resonance in the presence of limiting processes. KVEKA, no. 9, 1986, 1923-1925.

4. Stimulated Scattering

a. Miscellaneous Scattering

232. Arakelyan, S.M.; Arushanyan, L.Ye.; Chilingaryan, Yu.S. (YeGU). Fluctuation and scattering of light in nematic liquid crystals during phase transitions in external fields. ZTEFA, no. 10, 1986, 1949-1956.

233. Baranov, A.V.; Bobovich, Ya.S.; Petrov, V.I. (). Investigation of resonance spectra of Raman and inelastic three-photon scattering of indigoid dyes amplified by adsorption on silver colloidal particles. OPSPA, vol. 61, no. 3, 1986, 505-510.

234. Bespalov, V.I.; Bubis, Ye.L.; Kulagin, O.V.; Pasmanik, G.A.; Shilov, A.A. (IPF). Stimulated Brillouin scattering and stimulated temperature scattering of microsecond pulses. KVEKA, no. 10, 1986, 2044-2050.

235. Dianov, Ye.M.; Pilipetskiy, A.N.; Prokhorov, A.M.; Serkin, V.N. (). Nonlinear transformation of continuous radiation in light guide lasers using stimulated scattering. ZETFA, vol. 91, no. 4, 1986, 1249-1261.

236. Golubovich, G.K.; Korableva, Ye.Yu.; Baburina, I.I.; Matveyev, V.K. (MGU). Far spectrum of the depolarized scattering of light in liquids. KHFID, no. 9, 1986, 1172-1176.

237. Kozhevnikova, I.N.; Lyakhov, G.A. (). Stimulated scattering as a mechanism for distributed feedback. IANFA, no. 4, 1986, 808-811. (RZFZA, 86/9L1079).

238. Marusiy, T.Ya.; Reznikov, Yu.A.; Reshetnyak, V.Yu.; Soskin, M.S.; Khizhnyak, A.I. (). Light scattering in a nematic liquid crystal cell with finite anchoring energy. ZETFA, vol. 91, no. 3, 1986, 851-860.

b. Raman

239. Bol'shov, L.A.; Likhanskiy, V.V.; Sukharev, A.G. (IAE). Theory of stimulated Raman scattering in inhomogeneously broadened resonance media. IAE. Preprint, no. 4251/1, 1986, 20 p. (RZFZA, 86/10L1055).

240. Gogolinskaya, T.A.; Patsayeva, S.V.; Fadeyev, V.V. (MGU). Regularities of change in the 3100-3700 cm⁻¹ band of Raman scattering of water in salt aqueous solutions. DANKA, vol. 290, no. 5, 1986, 1099-1103.

241. Grishchuk, V.P.; Naulik, L.R.; Slobodyanyuk, A.V. (). Raman scattering investigation of the indicator-surface orientation of an InPS₄-crystal gyration pseudotensor in the low-frequency infrared range. OPSPA, vol. 61, no. 3, 1986, 532-536.

242. Ipatova, I.P.; Subashiyev, A.V.; Udod, L.V. (FTI). Hyper-Raman scattering of light from a near-surface layer of a semiconductor. FTVTA, no. 10, 1986, 3044-3050.

243. Pitey, V.N.; Shmiglyuk, M.I. (IPFANM). Tuning of the energy spectrum of incoherent polaritons and phonons in semiconductors under the action of a strong polariton mode [resulting from stimulated Raman scattering]. VINITI. Deposit, no. 3783-V, 26 May 1986, 18 p. (RZFZA, 86/10L1064).

c. Brillouin

244. Davydov, M.A.; Shipilov, K.F.; Shmaonov, T.A. (IOF). Formation of stimulated Brillouin scattering pulses with a high degree of compression in liquids. KVEKA, no. 10, 1986, 2125-2127.

245. Grigor'yev, S.F.; Zaskal'ko, O.P. (FIAN). Violation of phase synchronism during stimulated Brillouin scattering in light-absorbing media. KRSFA, no. 10, 1986, 22-25.

246. Zaskal'ko, O.P.; Kuz'min, V.V. (FIAN). Nature of anomalous displacement of stimulated Brillouin scattering lines. KRSFA, no. 6, 1986, 13-15.

247. Zaskal'ko, O.P.; Zozulya, A.A.; Panaioti, N.N.; Tikhonchuk, V.T. (FIAN). Self-diffraction and stimulated Brillouin scattering of opposed light waves in absorbing media. FIAN. Preprint, no. 344, 1986, 19 p. (RZFZA, 86/10L1066).

d. Rayleigh

248. Bagdasarov, Kh.S.; Batoev, V.B.; Uyukin, Ye.M. (IKAN). Nonstationary isotropic photoinduced light scattering in $\text{LiTaO}_3:\text{Cr}$. KVEKA, no. 10, 1986, 1962-1963.

249. Lavrik, V.V.; Shunyakov, V.T. (). Rayleigh scattering of light in non-centrosymmetric small-thickness crystals. FTVTA, no. 2, 1986, 620-622. (RZFZA, 86/9L419).

250. Novopashin, S.A.; Perepelkin, A.L.; Yarygin, V.N. (ITF). Pulsed local method of the investigation of gas flows by the Rayleigh scattering of light. PRTEA, no. 5, 1986, 158-159.

5. Self-focusing

251. Andreyev, A.A.; Lebo, I.G.; Rozanov, V.B. (FIAN). Development of small-scale self-focusing of laser radiation in a plasma corona of spherical targets. KVEKA, no. 10, 1986, 2137-2141.

252. Askar'yan, G.A.; Lerman, A.A. (IOF). Bright spot shadow of an illuminated object (or the subsidence of intensity), operating at a surface of a nonlinear medium. ZFPRA, vol. 44, no. 7, 1986, 308-311.

253. Bukhman, N.S.; Gutman, A.L. (VLTI). Non-aberrational approximation in the theory of self-focusing. IVYRA, no. 10, 1986, 1163-1169.

254. Muradyan, A.Zh. (NIIIFKS). A constriction of caustic under resonant self-focusing with low nonlinear saturation. KVEKA, no. 9, 1986, 1935-1938.

6. Acoustic Interaction

255. Amirov, R.Kh.; Zudeyev, O.G. (NIIMF). Intraband emission of electrons interacting with acoustic phonons and a high-frequency field. FTPPA, no. 10, 1986, 1921-1925.

256. Anan'yev, Ye.G.; Pozhar, V.E.; Pustvoyt, V.I. (). Bragg diffraction of light by a standing sonic wave. OPSPA, vol. 61, no. 4, 1986, 885-888.
257. Avanesyan, S.M.; Gusev, V.E.; Zhdanov, B.V.; Zheludev, N.I.; Kuznetsov, V.I.; Petrosyan, Ye.G. (MGU). Nonlinear process of the optical excitation of Rayleigh waves in silicon. Thermoelastic and concentration-deformation mechanism. PZTFD, no. 17, 1986, 1067-1071.
258. Ayukhanov, R.A.; Gulyayev, Yu.V.; Shkerdin, G.N. (IRE). Acoustooptical interaction in the region of exciton resonances. FTPPA, no. 10, 1986, 1933-1936.
259. Barta, C.; Kostal, E.; Ctyroki, J.; Klima, M. (). Acoustooptic unit. Author's certificate Czechoslovakia, no. 229039, 15 Mar 1986. (RZRAB, 86/10Yel65).
260. Burlak, G.N.; Grimal'skiy, V.V.; Kotsarenko, N.Ya. (KGU). Theory of three-wave acoustooptic interaction. ZETFA, no. 4, 1986, 1487-1492.
261. Deyev, V.N.; Pyatakov, P.A. (). Photoacoustic effect in photoconductive piezoelectrics. ZTEFA, no. 10, 1986, 1909-1915.
262. Filippov, V.V.; Khodinskiy, A.N. (IFANB). Excitation of acoustic pulses and optoacoustic interaction in layered media. DBLRA, no. 5, 1986, 410-413.
263. Golenishchev-Kutusov, V.A.; Migachev, S.A.; Rez, I.S. (). Investigation of acoustic and optical properties of ferro- and piezoelectrics by the optoacoustic method (in English). CRTED, no. 3, 1986, 423-430. (RZFZA, 86/9N894).
264. Gurevich, S.A.; Kikkarin, S.M.; Petrov, D.V.; Skopina, V.I.; Timofeyev, F.N.; Tsarev, A.V.; Yakovkin, I.B. (). Acoustooptic interaction in a $Ta_{(sub2)}O_{(sub5)}-SiO_{(sub2)}-GaAs$ waveguide. PZTFD, no. 20, 1986, 1225-1227.
265. Ivanov, A.A.; Nechayev, Yu.S.; Yakovleva, T.G. (IFVE). Control device for an acoustooptic modulator in a laser grating graphic photoplotter. PRTEA, no. 5, 1986, 208-210.

266. Ivanov, A.I.; Shcherbak, Yu.M. (). Expansion of the band of acoustooptic interaction in TeO_2 cells by frequency response equalization of the power amplifier. VINITI. Deposit, no. 4344-V, 13 Jun 1986, 8 p. (RZFZA, 86/9P214).
267. Kitayeva, V.F.; Fedorovich, V.Yu.; Antyukhov, A.M.; Zharikov, Ye.V.; Kutukov, V.I.; Nosenko, A.Ye. (FIAN). Elastic and photoelastic properties of calcium-gallium-germanium garnet. KRSFA, no. 10, 1986, 20-21.
268. Kozlov, A.I.; Plesskiy, V.P. (IRE). Self-induced light diffraction by surface acoustic waves. AKZHA, no. 5, 1986, 694-695.
269. Lapin, A.D. (AKIN). Interaction of surface waves, propagating along an inhomogeneous plate in a liquid. AKZHA, no. 5, 1986, 695-697.
270. Lyamshev, L.M. (). Lasers in acoustics. Impakt: Nauka i obshchestvo, no. 2, 1986, 79-88. (RZFZA, 86/10P148).
271. Samokhin, A.A. (FIAN). Photoacoustic signal during the melting of matter under the action of an optical radiation pulse. KRSFA, no. 8, 1986, 40-42.
272. Shalayev, V.M.; Yakhnin, V.Z. (IFSOAN). Generation of self-induced diffraction: sound in gases under pulsed excitation. IFSOAN. Preprint, no. 374F, 1986, 20 p. (RZFZA, 86/9L1120).
273. Strel'tsov, V.N. (IOF). Optoacoustic interaction in semiconductors and sonic beam wave front reversal. KVEKA, no. 10, 1986, 2144-2146.
274. Zadorin, A.S.; Sharangovich, S.N. (TIASUR). Acoustooptic interaction of wave beams in crystals with circular birefringence. IVYRA, no. 10, 1986, 1228-1237.
275. Zadorin, A.S.; Sharangovich, S.N. (). Wide-angle acoustooptical interaction in paratellurite. OPSPA, vol. 61, no. 3, 1986, 642-645.

G. SPECTROSCOPY OF LASER MATERIALS

276. Antonov, V.A.; Arsen'yev, P.A.; Vasil'yev, A.N.; Kopylova, Ye.K.; Starikov, A.M.; Tadzhi-Aglayev, Kh.G.; Amanyanyan, S.N.; Melkonyan, T.A. (MEI). Spectroscopic properties of Nd³⁺ ions in Ba₃LaM₃(sup5+)O₁₂ single crystals (where M=Nb,Ta). MEI. Nauchnyye trudy, no. 61, 1985, 18-23. (RZFZA, 86/9L390).

277. Arkhangel'skaya, V.A.; Guseva, Ye.V.; Zinger, G.M.; Korolev, N.Ye.; Reyterov, V.M. (). Thermal stability of F^(sup-)(sub2) centers in radiationally colored LiF crystals with oxygen-containing impurities. OPSPA, vol. 61, no. 3, 1986, 542-549.

278. Bondarev, A.D.; Krupen'kin, T.N.; Kudryavtysev, V.G.; Leonov, Ye.I. (). Sensitized luminescence of rare-earth impurities in sillenite structure crystals. OPSPA, vol. 61, no. 3, 1986, 554-559.

279. Gorban', I.S.; Gumennyuk, A.F.; Degoda, V.Ya. (). High-energy levels of a Cr^(sup3+) ion in Y₃Al₅O₁₂. OPSPA, vol. 61, no. 3, 1986, 639-641.

280. Kovalev, A.A.; Nekrasov, G.L.; Serak, S.V. (). Bleaching of dyes in nematic liquid crystals. ZPSBA, vol. 45, no. 3, 1986, 400-406.

281. Prihhot'ko, A.F.; Pavloshchuk, V.A.; Sinyavskiy, P.N.; Shanskiy, L.I. (). Radiation spectrum of Se₂ molecules in a Kr matrix. UFIZA, no. 5, 1986, 675-679. (RZRAB, 86/9Ye65).

282. Ryzhikov, B.D.; Senatorova, N.P.; Simonov, G.V. (). Effect of adsorption on the measured spectral characteristics of liquid dye solutions. OPSPA, vol. 61, no. 3, 1986, 497-504.

283. Saprykin, E.G.; Soldatov, V.P.; Sorokin, V.A. (IAESOAN). Narrow magnetooptic higher order resonances in neon at the 3s₂-2p₄ transition. KVEKA, no. 10, 1986, 2057-2066.

H. ULTRASHORT PULSE GENERATION

284. Akhmanov, S.A.; Gordiyenko, V.M.; Dzhidzhoyev, M.S.; Krayushkin, S.V.; Kudinov, I.A.; Platonenko, V.T.; Popov, V.K. (MGU). Generation and amplification of subpicosecond ultraviolet radiation pulses by means of excimer lasers. KVEKA, no. 10, 1986, 1957-1958.

285. Akhmanov, S.A.; Val'shin, A.M.; Gordiyenko, V.M.; Dzhidzhoyev, M.S.; Krayushkin, S.V.; Kudinov, I.A.; Platonenko, V.T.; Popov, V.K.; Taranukhin, V.D. (MGU). Stimulated emission and amplification of ultrashort light pulses by means of excimer lasers. KVEKA, no. 10, 1986, 1992-1998.

286. Akhmanov, S.A.; Vysloukh, V.A.; Chirkin, A.S. (MGU). Self-action of wave packets in a nonlinear medium and generation of femtosecond laser pulses. UFNAA, vol. 149, no. 3, 1986, 449-509.

287. Alferov, Zh.I.; Zhuravlev, A.B.; Portnoy, Ye.L.; Stel'makh, N.M. (FTI). Generation of picosecond pulses in injection heterolasers with Q-switching. PZTFD, no. 18, 1986, 1093-1098.

288. Andreyev, A.V. (). Self-Q-switching during short pulse generation. PZTFD, no. 17, 1986, 1025-1028.

289. Demchuk, M.I.; Mikhaylov, V.P.; Pavlovich, V.S.; Yumashev, K.V.; Ishchenko, A.A.; Yeremeyeva, Ye.P.; Smirnova, Z.A.; Tolmachev, A.I. (NIIIPFP; IFANB; IOKhK). Dependence between the parameters and structure of thiopyrilotricarbocyanine passive film switches [for ultrashort pulse generation]. KHFID, no. 9, 1986, 1184-1192.

290. Karmenyan, A.V.; Meliksetyan, T.E.; Pokhsraryan, K.M. (). Generation of high-power tunable ultrashort light pulses in a thin-film quasi-waveguide laser with distributed feedback. IAAFA, no. 2, 1986, 80-83. (RZFZA, 86/9L1074).

291. Korvatovskiy, B.N.; Gorokhov, V.V.; Logunov, S.L.; Pashchenko, V.Z. (MGU). Improvement in the time resolution of a picosecond absorption spectrometer by means of the length selection of laser light pulses. KVEKA, no. 9, 1986, 1815-1819.

292. Piskarskas, A.; Stabinis, A.; Yankauskas, A. (VilGU). Phase phenomena in parametric amplifiers and generators of ultrashort light pulses. UFNAA, vol. 150, no. 1, 1986, 126-143.

293. Platonenko, V.T.; Taranukhin, V.D. (). Electron density wave and ultrashort pulse generation in the IR. IANFA, no. 4, 1986, 786-790. (RZFZA, 86/10L1028).

294. Suesse, K.E.; Lucht, H.; Drommert, H. (). Device for ultrashort pulse generation. Patent GDR, no. 233249, 19 Feb 1986. (RZRAB, 86/9Ye599).

295. Varnavskiy, O.P.; Leontovich, A.M.; Mozharovskiy, A.M.; Sidoruk, N.V. (FIAN). Study on the processes of ultrashort pulse generation in self-mode-locked lasers with high gain in the active medium. FIAN. Preprint, no. 110, 1986, 60 p. (RZFZA, 86/9LL027).

J. CRYSTAL GROWING

296. Alferov, Zh.I.; Andreyev, V.M.; Vodnev, A.A.; Konnikov, S.G.; Larionov, V.R.; Pogrebitskiy, K.Yu.; Rumyantsev, V.D.; Khvostikov, V.P. (FTI). AlGaAs heterostructures with quantum size layers, obtained by low-temperature liquid phase epitaxy. PZTFD, no. 18, 1986, 1089-1093.

K. THEORETICAL ASPECTS OF ADVANCED LASERS

297. Akhmanov, S.A. (MGU). Khokhlov method in the theory of nonlinear waves [including theory of gamma lasers]. UFNAA, vol. 149, no.3, 1986, 361-390.

298. Bratman, V.L.; Gubanov, V.P.; Denisov, G.G.; Korovin, S.D.; Movshchevich, V.Z.; Polevin, S.D.; Rostov, V.V.; Smorgonskiy, A.V. (). Coherent radiation from a heavy-current beam of relativistic electrons. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Part 3. Tomsk, 1986, 6-8. (RZRAB, 86/9Ye85).

299. Cojocaru, E. (). Similarity relations for hydrogen-like ions used in x-ray laser study (in English). RRPQA, no. 3, 1986, 213-219. (RZRAB, 86/10Ye18).

300. Ginzburg, N.S.; Kovalev, N.F. (). Channelization of radiation by a heavy-current thin relativistic electron beam in a free electron laser. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Part 3. Tomsk, 1986, 17-19. (RZRAB, 86/9Ye86).

301. Ginzburg, N.S.; Novozhilova, Yu.V. (IPF). Linear theory of free electron lasers with an adiabatically energized field of an undulator. ZTEFA, no. 9, 1986, 1709-1717.

302. Ginzburg, N.S.; Sergeyev, A.S. (IPF). Theory of free electron laser klystrons with a periodic pulsed injection electron beam. ZTEFA, no. 9, 1986, 1693-1699.

303. Kubarev, V.A.; Cherepenin, V.A. (IRE). Stimulated scattering of waves using a relativistic electron flow in the presence of a homogeneous magnetic field. Quasilinear theory. ZTEFA, no. 9, 1986, 1673-1681.

304. Serov, A.V. (FIAN). Scattering of relativistic electrons by an electromagnetic beam. KRSFA, no. 5, 1986, 40-42.

L. GENERAL LASER THEORY

305. Aleksandrov, A.P.; Borovin-Romanov, A.S.; Valiyev, K.A.; Velikhov, Ye.P.; Vonsovskiy, S.V.; Ginzburg, V.L.; Zel'dovich, Ya.B.; Kadomtsev, B.B.; Kotel'nikov, V.A. (auths); Prokhorov, A.M. (biographic subject). (). Aleksandr Mikhaylovich Prokhorov on his seventieth birthday. UFNAA, vol. 149, no. 3, 1986, 577-578.

306. Belinskiy, A.V.; Chirkin, A.S. (). Natural spatial coherence of single-mode laser beams. IANFA, no. 4, 1986, 791-795. (RZFZA, 86/9L906).

307. Bukhenskiy, M.F.; Semenov, A.S. (). Second International Conference on Trends in Quantum Electronics, Bucharest, 2-6 Sep 1985. KVEKA, no. 9, 1986, 1939-1950.

308. Danileyko, M.V.; Kravchuk, A.L.; Nechiporenko, V.N.; Tselinko, A.M.; Yatsenko, L.P. (IFANUk). Dynamic chaos in a ring gas laser. KVEKA, no. 10, 1986, 2147-2149.

309. Datsyuk, V.V.; Izmaylov, I.A.; Kochelap, V.A. (IPANUk). Ultimate quantum yield of molecular lasers due to electronic transitions with vibrational depopulation in an excited state. KVEKA, no. 10, 1986, 2120-2123.

310. Kaliteyevskiy, N.I. (biographical subject) (). Nikolay Ivanovich Kaliteyevskiy on his seventieth birthday. OPSPA, vol. 61, no. 3, 1986, 671-672.

311. Makovetskiy, A.A. (). Efficiency of a laser with intracavity pump conversion. RAEIA, no. 9, 1986, 1823-1831.

312. Nadezhdin, B.B.; Oks, Ye.A. (VNITSISPIV). Highly-excited atom in a high-frequency field of linear-polarized electromagnetic radiation. PZTFD, no. 20, 1986, 1237-1240.

313. Zuyev, V.S.; Korol'kov, K.S.; Nosach, O.Yu.; Orlov, Ye.P. (). Inertial nonlinear processes in laser media and their effect on high-power laser beams. IANFA, no. 4, 1986, 765-772. (RZFZA, 86/9L907).

II. LASER APPLICATIONS

A. BIOLOGICAL EFFECTS

314. Aznabayev, M.T.; Kurbanayeva, F.Sh.; Surkova, V.K. (UFNIIGB). Sixty years of the Ufa Scientific Research Institute of Eye Diseases. VEOFA, no. 4, 1986, 72-73.
315. Balashevich, L.I.; Boyko, E.V. (). Comparative estimate of the long-term results of retinal vein occlusions after routine and laser treatment. VEOFA, no. 3, 1986, 59-63.
316. Belyayeva, M.I.; Varnakov, S.I. (VNIIGBol). State of the corneal endothelium in diabetes mellitus patients after argon laser coagulation of the retina. VEOFA, no. 4, 1986, 43-45.
317. Dzhaliashvili, O.A.; Baranov, I.Ya. (LMI). Method for increasing the effect of laser action in unpigmented secondary cataracts. VEOFA, no. 4, 1986, 15-17.
318. Gapeyeva, T.A.; Glazkov, V.N.; Zheltov, G.I.; Meshkov, G.G.; Iodol'tsev, A.S. (). Laser method for determining the temperature dependence of the reaction rate constant of photocoagulation in vivo. VBSFA, no. 3, 1986, 81-85. (RZFZA, 86/10L1179).
319. Grishina, Ye.F.; Kogan, M.Ye.; Pokrovskaya, L.A.; Stepanov, G.S.; Ushkova, I.N. (IGTPZ; IRGSZh; LSGMI). Action of polarized and depolarized laser beams on the mutual relationship between the glucocortical function of the cortex of the adrenal gland and systemic hemodynamics. GTPZA, no. 10, 1986, 52-54.
320. Ivanov, A.S. (). Laser therapy of arthritis and arthrosis of the temporal mandibular joint. VMEZA, no. 9, 1986, 48-50.
321. Katsnel'son, L.A.; Makarskaya, N.V.; Forofonova, T.I.; Akhmedzhanova, Ye.V.; Balishanskaya, T.I. (MNII). Diagnostics and treatment of complicated fossae of the optic nerve disk. VEOFA, no. 4, 1986, 49-51.
322. Kovalevskiy, Ye.D.; Mitkikh, D.I.; Mishustin, V.V.; Noskova, A.D.; Blinov, S.B. (MGDKBol). Ophthalmology equipment at the "Zdravookhraneniye [public health]-85" exhibit, Moscow, 28 May - 6 Jun 1985. VEOFA, no. 4, 1986, 75-77.

323. Maksimov, N.I. (IzhGMI). He-Ne laser treatment of bronchial asthma and chronic obstructive bronchitis. SOMEA, no. 9, 1986, 103-105.

324. Mamedov, N.G.; Shtilerman, A.L. (MGMIVt). Comparative studies on the effectiveness of laser trabeculoplasty for patients with primary open angle glaucoma with varying degrees of pigmentation of the eye's trabecular apparatus structures. VEOFA, no. 5, 1986, 17-20.

325. Pashchenko, V.Z.; Korvatovskiy, B.N.; Logunov, S.L.; Vasil'yev, S.S.; Kononenko, A.A.; Noks, P.P.; Zakharova, N.I.; Grishanov, N.P.; Rubin, A.B. (MGU). Efficiency of picosecond electron transfer during photosynthesis depending on the state of hydrogen bonds in the reaction center. DANKA, vol. 290, no. 3, 1986, 742-747.

326. Pikulev, A.T.; Zyryanova, T.N.; Lavrova, V.M.; Mostovnikov, V.A.; Nechayev, S.V.; Lobazov, A.F.; Metel'skiy, G.A. (BGU; IFANB). Effect of c-w and modulated laser radiation on the activity of enzymes of glutamic acid metabolism in rat tissues. Radiobiologiya, no. 5, 1986, 712-714.

327. Razygrin, B.A.; Polonskiy, A.K.; Sterlin, Yu.G. (). Magnetolaser therapy and its hardware. Elektronno-opticheskaya i fiziko-opticheskaya apparatura: Razrabotka i primeneniye. Moskva, 1985, 35-37. (RZRAB, 86/10Ye515).

328. Shormanov, E.V. (). Polyclinical use of the Skal'pel'-1 laser surgical device. VMEZA, no. 9, 1986, 47-48.

329. Shurkin, V.I. (DBMZhD). Iridectomy on eyes with irises that are resistant to laser action. VEOFA, no. 5, 1986, 15-17.

330. Stepanov, A.V.; Akopyan, V.S. (VNIIGBol; MNII). Two hundred optico-reconstructive operations with a YAG laser. VEOFA, no. 5, 1986, 31-35.

331. Ziangirova, G.G.; Georgiyeva, V.B. (VNIIGBol). Using a CO₂ laser in plastic surgery of the eyelids and conjunctiva. Experimental study. VEOFA, no. 3, 1986, 41-44.

B. COMMUNICATIONS SYSTEMS

332. Alekseyeva, Ye.I.; Kachalova, N.Yu.; Milyavskiy, Yu.S.; Nanush'yan, S.R.; Sokolyuk, Ye.F.; Fel'd, S.Ya. (). Organosilicon polymer claddings for fiber lightguides. VYSBA, v. B28, no. 5, 1986, 348-352. (RZFZA, 86/9L722).
333. Bakinovskiy, K.N.; Kirilenko, A.I.; Gur'yevich, E.S.; Lappo, O.I.; Leonov, I.P.; Pigulevskaya, L.D. (NIIPFP). Detachable coupler for fiber lightguides. OTIZD, no. 9, 1986, 1216752. (RZRAB, 86/10Ye211).
334. Barabash, P.A.; Kuznetsov, V.I. (). Noise immunity in lightguide transmission systems with integrated pulsed modulation. Sistemy i sredsta peredachi informatsii po kanalam svyazi. Leningrad, 1985, 28-34. (RZRAB, 86/9Ye369).
335. Birkenstock, N.; Spangenberg, P.; Seifert, O.; Tischer, K. (). Method for improving the spectral damping characteristics of lightguides. Patent GDR, no. 231141, 18 Dec 1985. (RZRAB, 86/9Ye246).
336. Buritskiy, K.S.; Chernykh, V.A. (IOF). Properties of LiNbO₃:Ti waveguides with suppressed Li₂ back-diffusion. KVEKA, no. 10, 1986, 2151-2154.
337. Burlak, G.N.; Grimal'skiy, V.V.; Kotsarenko, N.Ya. (KGU). Acoustoelectromagnetic solitons in optical fiber waveguides. IVYRA, no. 10, 1986, 1259-1263.
338. Chekhlatyy, N.A.; Stekhin, A.P.; Demchenko, N.P.; Bezrukov, V.V. (GiprougleavtDO; KhIIZhTDF). Device to determine damage sites in combined fiberoptic cables. OTIZD, no. 10, 1986, 1218476. (RZRAB, 86/9Ye502).
339. Dem'yanenko, P.A.; Nazarov, V.D.; Tereshchenko, A.G. (GOI). Optical coupler for fiber optic systems. OPMPA, no. 10, 1986, 55-60.
340. Dimitrov, N.K.; Manopov, E.B.; Purvanov, P.S. (). Device for coupling fiber lightguides to radiators and photodetectors. Author's certificate Bulgaria, no. 37042, 29 Mar 1985. (RZRAB, 86/9Ye348).
341. Eppert, H. (). Assembly of lightguide cables. Institut fuer Post und Fernmeldewessen. DDR. Information, no. 312f, 1985, 61-74. (RZRAB, 86/10Ye195).

342. Fechner, R. (). Measuring the parameters of lightguide cable lines. Institut fuer Post und Fernmeldewessen. DDR. Information, no. 312f, 1985, 21-30. (RZRAB, 86/10Ye318).

343. Fedorov, S.Ye.; Mart'yanov, A.N. (). Synthesis of signals for optical channels. RAE LA, no. 3, 1996, 526-530.

344. Frenkel', L.A. (). Effect of the refraction index gradient on the performance of a single-mode optical fiber. RAE LA, no. 9, 1986, 1878-1881.

345. Fritzsche, W. (). Theoretical basis for lightguide communications. Institut fuer Post und Fernmeldewessen. DDR. Information, no. 312f, 1985, 12-20. (RZRAB, 86/10Ye228).

346. Garbuzinski, H. (). Method and device for applying a protective cladding on a glass fiber bundle. Patent GDR, no. 229073, 30 Oct 1985. (RZRAB, 86/9Ye526).

347. Glas, P.; Mueller, R.; Kleher, A.; Hartwig, P. (). Device to obtain laser pulses [for lightguide transmission]. Patent GDR, no. 229253, 30 Oct 1985. (RZRAB, 86/9Ye367).

348. Gorchakov, V.K.; Kutsayenko, V.V.; Potapov, V.L. (IRE). Electrooptical modulation of light during multiplexing through an optically active crystal. ZTEFA, no. 9, 1986, 1856-1858.

349. Grigor'yants, V.V.; Zologin, A.N.; Ivanov, G.A.; Isayev, V.A.; Kozel, S.M.; Listvin, V.N.; Chamorovskiy, Yu.K. (IRE). Polarization effects in birefringent fiber optic waveguides with an elliptical borosilicate cladding. KVEKA, no. 10, 1986, 2080-2084.

350. Hansske, A. (). Optimization of the refractive index profile of externally clad lightguides. NACHA, no. 4, 1986, 143-144. (RZRAB, 86/10Ye173).

351. Il'in, V.G.; Karapetyan, G.O.; Remizov, N.V.; Khoreyan, R.G. (GOI). Investigation of the parameters of switching devices of fiber optic communication lines based on graded-index optical fibers. OPMPA, no. 9, 1986, 3-6.

352. Joessel, K. (). Construction and properties of lightguide cables. Institut fuer Post und Fernmeldewessen. DDR. Information, no. 312f, 1985, 31-43. (RZRAB, 86/10Ye198).

353. Karpenko, V.A. (). Variant principle at the boundaries of partial regions in the theory of various types of optical waveguides. Kovariantnyye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 47-55. (RZFZA, 86/10L55).

354. Karpenko, V.A.; Mogilevich, V.N. (). Theory of optical fibers with biaxial anisotropy. Kovariantnyye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 56-60. (RZFZA, 86/10L43).

355. Kitze, L. (). Route selection and laying of lightguide cables along cable channeling lines. Institut fuer Post und Fernmeldewessen. DDR. Information, no. 312f, 1985, 51-60. (RZRAB, 86/10Ye197).

356. Kontorov, M.D. (). Selecting various design parameters of lightguide synchronization systems for radar synchronous signal transmission. Voprosy obrabotki radiofizicheskoy i radiotekhnicheskoy informatsii. RTI. Moskva, 1985, 83-87. (RZFZA, 86/9Zh151).

357. Korovkin, V.V.; Perminov, S.V.; Tatsenko, V.G. (). Lightguide communications system for computer terminals. RATEA, no. 6, 1986, 79-81. (RZRAB, 86/9Ye459).

358. Kosmachev, A.F.; Rudnitskiy, V.B.; Sumkin, V.R. (). Optimization of the optical path of an instrument to determine the rupture site of a lightguide in an optical communication line. Sistema i sredstva peredachi informatsii po kanalam svyazi. Leningrad, 1985, 40-44. (RZRAB, 86/9Ye477).

359. Kovtyak, D.S.; Khramtsov, P.P. (). Automated subsystem to study the industrial process for drawing out optical fiber. Teplofizika i fiziko-khimicheskiye protsessy v energeticheskikh ustanovkakh. Minsk, 1986, 109-113. (RZFZA, 86/10L695).

360. Lehmann, J.; Keiling, W. (). Method to measure damping in transmission links of a fiberoptic system. Patent GDR, no. 230634, 4 Dec 1985. (RZRAB, 86/9Ye497).

361. Leonov, Ye.I.; Skvortsov, L.I.; Smirnov, V.M.; Semenov, V.N. (FTI). Excitation of a multimode optical fiber with a plane end face by a source of light radiation. ZTEFA, no. 9, 1986, 1764-1768.

362. Malykhin, K.V. (LGU). Perturbation of the point spectrum of a dielectric waveguide. VINITI. Deposit, no. 5225-V, 17 Jul 1986, 30 p. (RZRAB, 86/10Ye186).

363. Mogilevich, V.N.; Romanenko, A.A. (). Potential functions method in the theory of planar anisotropic optical waveguides. Kovariantnye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 61-68. (RZFZA, 86/10L56).

364. Mykityuk, V.I.; Pis'menny, A.Yu. (KGU). Interaction between optical radiation and magnetostatic waves in film ferrite garnet waveguides. UkrNIINTI. Deposit, no. 851-Uk, 25 Mar 1986, 48 p. (RZFZA, 86/10Zh356).

365. Nesterova, Z.V.; Aleksandrov, I.V. (). Correlation between a microdefect structure in silica glasses and parameters of stimulated Brillouin scattering lines in optical fibers. ZPSBA, vol. 45, no. 4, 1986, 670-676.

366. Perepechko, S.N. (). Using Hermite polynomials to calculate dispersion and propagation of pulses in homogeneous fiber lightguides. VBSFA, no. 2, 1986, 60-67. (RZFZA, 86/9L66).

367. Romanovskiy, M.Yu. (IOF). Dynamic instability of the amplitude of a light beam in a real optical light guide. KRSFA, no. 10, 1986, 3-4.

368. Rossner, S. (). Determining the refractive index profile of multi- and single-mode lightguides by refracted near-field measurement. NACHA, no. 4, 1986, 139-142. (RZRAB, 86/9Ye281).

369. Schreiter, W. (). Application of the DUeS-LL-8 digital lightguide communications system. Institut fuer Post und Fernmeldewesen. DDR. Information, no. 312f, 1985, 43-50. (RZRAB, 86/10Ye230).

370. Schrofel, J.; Denk, J.; Buric, M.; Pergl, J. (). Method for shaping the end-face of a planar lightguide. Author's certificate Czechoslovakia, no. 223273, 15 Mar 1986. (RZRAB, 86/9Ye319).

371. Seifert, O.; Gadau, M.; Spangenberg, P.; Birkenstock, N.; Tischer, K.; Klinger, A. (). Method and device for controlling the parameters of an optical transmitter. Patent GDR, no. 233900, 12 Mar 1986. (RZRAB, 86/10Ye307).

372. Semenov, A.B. (). Effect of modulating the directional pattern of semiconductor radiators, on the level of nonlinear noise in fiberoptic communication lines with frequency-multiplexed channels. Sistemy i sredsta peredachi informatsii po kanalam svyazi. Leningrad, 1985, 35-39. (RZRAB, 86/9Ye358).

373. Shvydkov, A.N. (). Modeling of devices for correcting errors in digital laser record players. CNTKPEEM, 8-10 Apr 1986. Tezisy dokladov. Novosibirsk, 1986, 79. (RZRAB, 86/9Ye655).

374. Sinkevich, V.I.; Uryadov, V.N.; Marynko, A.A.; Soborova, I.G. (). Instrument for measuring the transmission characteristics of an optical cable. OTIZD, no. 14, 1986, 1224645. (RZRAB, 86/10Ye317).

375. Smirnov, Yu.V.; Tumanov, L.V.; Shchekin, Yu.G. (MEI). Splitters based on semicircular quartz polymer lightguides. MEI. Nauchnyye trudy, no. 61, 1985, 100-107. (RZFZA, 86/9L725).

376. Strekalovskiy, O.V.; Chelnokov, L.P. (OIYaI). Units for transmitting information over fiberoptic cables. OIYaI. Soobshcheniye, no. R10-86-269, 1986, 7 p. (RZRAB, 86/10Ye194).

377. Sukhoivanov, I.A.; Petrov, S.I. (). Effect of the parameters of microbends on the diffusion of power in short lightguides. RTKHA, no. 79, 1986, 87-90. (RZFZA, 86/9Zh582).

378. Trabert, S.; Kleinert, H.; Pasker, H.; Koksch, P. (). Method for fabricating an adhesive binder for lightguide coupling. Patent GDR, no. 231142, 18 Dec 1985. (RZRAB, 86/9Ye325).

379. Valyayev, A.B.; Krivoshlykov, S.G.; Sisakyan, I.N. (IOF). Propagation of radiation in waveguides with an asymmetric transverse distribution of the refractive index. IOF. Preprint, no. 68, 1986, 25 p. (RZFZA, 86/9Zh325).

380. Vasil'yev, A.V.; Devyatikh, G.G.; Dianov, Ye.M.; Ignat'yev, S.V.; Plotnichenko, V.G.; Skripachev, I.V.; Churbanov, M.F.; Shipunov, V.A. (). Influence of cooling in the temperature range of 300-77 K on spectral optical losses of chalcogenide glass optical fibers. ZPSBA, vol. 45, no. 4, 1986, 691-694.

381. Vizel', A.A. (). Work on fiberoptic information transmission systems in Poland. ZRBEA, no. 6, 1986, 79-80.

382. Waldmann, J.; Ahlers, H.; Schaff, W.; May, H.J. (). Device for coupling lightguide fibers with optoelectronic transmitters and/or detectors and/or switching circuits. Patent GDR, no. 230089, 20 Nov 1985. (RZRAB, 86/9Ye351).

383. Westphal, K.D. (). Device for adjusting and fixing a lightguide to a hermetic laser housing. Patent GDR, no. 231861, 8 Jan 1986. (RZRAB, 86/9Ye361).

384. Wurbs, G.; Kuka, G.; Manthe, K.H. (). Method and device for testing primary claddings of optical fiber. Patent GDR, no. 232544, 29 Jan 1986. (RZRAB, 86/9Ye525).

385. Yegorov, Yu.V.; Ushakov, V.N. (). Acoustooptic spatial parametric principles of phase modulation [of radio signals]. IVUZB, no. 5, 1986, 95-97. (RZFZA, 86/10Zh102).

386. Yeliseyev, P.G.; Makhsoudov, B.I.; Pyatakhin, V.I.; Suvorov, Ye.V. (FIAN). Optical signal transmission from a region of increased temperature (125 degrees C) by means of a InGaAsP/InP laser at 1.3 μ m. KRSFA, no. 8, 1986, 22-23.

387. Zigmund, J.; Konopac, V. (). Circuit for generating cadence signals in optoelectronic communication system repeaters. Author's certificate Czechoslovakia, no. 230481, 1 Mar 1986. (RZRAB, 86/10Ye384).

388. Zorin, A.L.; Repin, V.N.; Gur'yanova, T.A. (). Device for reducing the protective cladding of optical fiber. OTIZD, no. 7, 1986, 1213511. (RZRAB, 86/10Ye328).

C. BEAM PROPAGATION

1. Theory

389. Al'tshuler, G.B.; Belashenkov, N.R.; Karasev, V.B.; Okishev, A.V. (). Effect of the self-diffraction of a light-pulse train in a weakly absorbing media. OPSPA, vol. 61, no. 4, 1986, 806-813.

390. Amstislavskiy, Ya.Ye. (). Interference in scattered beams in the presence of birefringence. OPSPA, v. 60, no. 4, 1986, 825-830.

391. Astaf'yeva, L.G.; Dedneva, G.P.; Prishivalko, A.P. (). Resonances in absorption of radiation by hollow spherical particles. DBLRA, no. 5, 1986, 414-417. (RZFZA, 86/9L349).

392. Auzin'sh, M.P. (). Polarization moments in the case of a state with a high angular moment. OPSPA, v. 60, no. 2, 1986, 406-410.

393. Bel'skiy, A.M. (). Shifts of bounded light beams during reflection. OPSPA, v. 60, no. 4, 1986, 792-796.

394. Belyy, V.N.; Voytenko, I.G.; Kulak, G.V.; Povet'yev, Ya.G. (IFANB). Reflection of light from amplifying layers with spatial modulation of the dielectric permittivity. IFANB. Preprint, no. 416, 1986, 26 p. (RZFZA, 86/9L9).

395. Beylinson, A.A.; Mitskevich, N.V. (). "Coherence" of photons corresponding to different spectral lines. PTGEA, no. 17, 1986, 45-47. (RZFZA, 86/9L29).

396. Bukhman, N.S.; Gutman, A.L. (VLTI). Violation of the laws of refraction and reflection by elliptical Gaussian beams in plane layered media without absorption. VINITI. Deposit, no. 4355-V, 13 Jun 1986, 7 p. (RZFZA, 86/9L5).

397. Bukhman, N.S.; Gutman, A.L. (VLTI). Deformation of wave packets in plane layered media without absorption (such as a collisionless plasma). VINITI. Deposit, no. 4356-V, 13 Jun 1986, 7 p. (RZFZA, 86/9L6).

398. Chesnokov, S.S. (). Structure of phase distortions of light beams propagating in a randomly inhomogeneous and nonlinear medium. IANFA, no. 4, 1986, 796-798. (RZFZA, 86/9L1089).

399. Fortus, V.M.; Shevtsov, B.M. (). Possibility of a statistical approach to the description of backscattering. OPSPA, v. 60, no. 3, 1986, 578-582.

400. Goryachev, B.V.; Larionov, V.V.; Kutlin, A.P.; Mogil'nitskiy, S.B.; Savel'yev, B.A. (). Parametrization of the scattering index in the problem of radiation transfer in spatially bounded scattering and absorbing media. ZPSBA, v. 44, no. 6, 1986, 1030-1032.

401. Goryachev, B.V.; Larionov, V.V.; Mogil'nitskiy, S.B.; Savel'yev, B.A. (). Introduction of integral parameters of the indicatrix of scattering of radiation. VINITI. Deposit, no. 4297-V, 12 Jun 1986, 6 p. (RZFZA, 86/9L70).

402. Goryachev, B.V.; Larionov, V.V.; Mogil'nitskiy, S.B.; Savel'yev, B.A.; Kutlin, A.P. (). Passage of radiation in media with a high concentration of scatterers. VINITI. Deposit, no. 4299-V, 12 Jun 1986, 6 p. (RZFZA, 86/9L71).
403. Goryachev, B.V.; Mogil'nitskiy, S.B.; Savel'yev, B.A. (). Effect of the parameters of a medium and reflecting surface on radiation transfer in a spatially bounded scattering medium. Part 1. VINITI. Deposit, no. 4300-V, 12 Jun 1986, 19 p. (RZFZA, 86/9L24).
404. Goryachev, B.V.; Mogil'nitskiy, S.B.; Savel'yev, B.A. (). Effect of the parameters of a medium and reflecting surface on radiation transfer in a spatially bounded scattering medium. Part 2. VINITI. Deposit, no. 4301-V, 12 Jun 1986, 14 p. (RZFZA, 86/9L25).
405. Gryn', V.I. (). Inverse problem in the linear theory of radiation transfer. ZVMFA, no. 6, 1986, 864-881. (RZFZA, 86/9L26).
406. Il'anova, T.M.; Ishchenko, T.V.; Sorokina, I.M. (MGU). Propagation of a light pulse in a semiconductor. VMUFA, no. 3, 1986, 36-41. (RZFZA, 86/10L1084).
407. Kalinina, O.D.; Lazareva, G.V.; Natarovskiy, S.N. (LITMO). Effect of laser beam divergence on the size of the illuminated area. IVUBA, no. 9, 1986, 69-73.
408. Khramovich, Ye.M.; Shepelevich, V.V. (). Interference of spherical waves in optically active media. VINITI. Deposit, no. 4254-V, 11 Jun 1986, 9 p. (RZFZA, 86/9L15).
409. Kokodiy, N.G.; Katrich, A.B. (). Diffraction pattern behind a cylinder in a half-shadow region. OPSPA, v. 60, no. 4, 1986, 820-824.
410. Mukimov, K.M.; Rakhimov, D.A.; Plaskiy, Yu.S.; Golovach, G.P. (). Laser-radiation diffraction on artificially produced band domain structures. OPSPA, vol. 61, no. 4, 1986, 796-800.
411. Muldashev, T.Z.; Sultangazin, U.M. (). Spherical harmonics method for solving problems of radiation transfer in a plane-parallel atmosphere. ZVMFA, no. 6, 1986, 882-893. (RZFZA, 86/9L28).

412. Murokh, I.Yu. (). Propagation of high-power optical radiation in a circular horizontal tube. *Teplofizika i fiziko-khimicheskiye protsessy v energeticheskikh ustankakh*. Minsk, 1986, 87-91. (RZFZA, 86/10L1084).

413. Nayboykin, Yu.V.; Ogurtsova, L.A.; Pyshkin, O.S.; Tsekhomskiy, V.A. (). Propagation of laser radiation in silver-halide photochrome glass. *OPSPA*, vol. 61, no. 3, 1986, 602-605.

414. Pekar, S.I. (). Additional lightwaves in crystals. Current status of experiments and theory. *Fizika molekulyarnykh kristallov. IFANUK*. Kiyev, Naukova dumka, 1986, 107-113. (RZFZA, 86/10L313).

415. Petrov, N.S.; Shakin, V.A. (). Calculating the coefficient of reflection of light beams from linear media based on plane wave approximation. *VBSFA*, no. 1, 1986, 78-81. (RZFZA, 86/9L1091).

416. Tymkul, L.V.; Tymkul, V.M. (NIIGAiK). Retroreflection of radiation from three-dimensional objects illuminated by laser beams with Gaussian energy distribution in transverse cross-section. *NIIGAiK. Trudy*, no. 25/65, 1985, 99-112. (RZFZA, 86/9L13).

417. Yeliseyev, A.A.; Ravodina, O.V.; Popova, T.N.; Stenina, V.V. (). Filtering properties of a system of N reflecting translucent planes. *VINITI. Deposit*, no. 4564-V, 23 Jun 1986, 20 p. (RZFZA, 86/9L12).

418. Yesipov, I.B.; Zosimov, V.V.; Naugol'nykh, K.A. (AKIN). Scattering of a modulation wave from the interaction of waves at a statistically nonequilibrium surface. *IFAOA*, no. 5, 1986, 548-550.

419. Zege, E.P.; Chaykovskaya, L.I. (). Propagation of polarized radiation in media with strongly anisotropic scattering. *ZPSBA*, v. 44, no. 6, 1986, 996-1004.

420. Zege, E.P.; Katsev, I.L. (). Optical transfer function of a strongly scattering layer. *ZPSBA*, v. 44, no. 5, 1986, 854-860.

421. Zege, E.P.; Katsev, I.L.; Makarevich, S.A. (). Optical transfer function of scattering layers observed over an inclined path. *VBSFA*, no. 3, 1986, 61-66. (RZFZA, 86/10L784).

2. Propagation in the Atmosphere

422. Aksenov, V.P.; Banakh, V.A.; Mironov, V.L.; Smalikho, I.N.; Chen, B.N. (). Random shifts of an optical image during reflection from a Lambert surface in a turbulent atmosphere. OPSPA, vol. 61, no. 4, 1986, 839-844.

423. Angelova, M. (Bulgaria); Donchev, A. (Bulg); Zasavitskiy, I.I.; Kosichkin, Yu.V.; Krystev, T. (Bulg); Kuznetsov, A.I.; Perov, A.N.; Penchev, S.P.; Stepanov, Ye.V.; Filippov, A.N.; Tsanev, V. (Bulg); Shotov, A.P. (FIAN). Automated tracking gas analyzer based on tunable diode lasers and its use to study the dynamics of air pollution. KRSFA, no. 10, 1986, 36-38.

424. Antyufeyev, V.S.; Nazaraliyev, M.A. (VTsSOAN). Monte-Carlo numerical study on the effect of refraction on the angular and spatial intensity distribution in a spherical atmosphere. VTsSOAN. Preprint, no. 625, 1986, 13 p. (RZFZA, 86/9L821).

425. Balin, Yu.S.; Belen'kiy, M.S.; Mironov, V.L.; Samokhvalov, I.V.; Safonova, N.V.; Razenkov, I.A. (IOA). Lidar investigations of aerosol inhomogeneities in the atmosphere. IFAOA, no. 10, 1986, 1060-1064.

426. Banakh, V.A.; Mironov, V.L.; Smalikho, I.N. (IOA). Reflection of light in a turbulent atmosphere under conditions of induced temperature inhomogeneity in the refractive index. IVYRA, no. 4, 1986, 384-394.

427. Bisyarin, V.P.; Ismailov, A.T.; Nishchak, Yu.N. (). Effect of natural conditions on the brightness characteristics of the earth's surface in the visible and infrared. Elektromagnitnyye volny v atmosfere i kosmicheskem prostranstve. Moskva, Nauka, 1986, 243-254. (RZFZA, 86/9L830).

428. Bruskov, A.V.; Ivashchenko, M.I.; Panov, V.P. (). Monochromatic radiation scattering by a moving polydisperse aqueous aerosol evaporating upon exposure to radiation. KVEKA, no. 10, 1986, 2025-2030.

429. Bukatyy, V.I.; Krasnopevtsev, V.N.; Shayduk, A.M. (AlGU). Temperature of carbon aerosol particles in a laser radiation field. IVUFA, no. 10, 1986, 110-113.

430. Bukatyy, V.I.; Krasnopevtsev, V.N.; Shayduk, A.M. (AlGU). Vaporization of hot carbon particles in an intense optical field. VINITI. Deposit, no. 4709-V, 30 Jun 1986, 20 p. (RZFZA, 86/10L1120).

431. Bukatyy, V.I.; Sutorikhin, I.A.; Shayduk, A.M. (AlGU). Surface temperature of carbon particles in a field of high-power laser radiation. TVYTA, no. 5, 1986, 1004-1007.

432. Bulatov, V.P.; Lobanov, B.D.; Maksimova, N.T.; Matyagin, Yu.V.; Raspopov, N.A.; Savchenko, A.N.; Sviridenkov, E.A. (FIAN). Absorption spectrum of the atmosphere in the 1.10 to 1.28 μm range, obtained by intracavity laser spectroscopy. KRSFA, no. 8, 1986, 46-48.

433. Godlevskiy, A.P.; Sharin, P.P. (). Using a CO₂ laser with a long resonator to determine the optical parameters of the atmosphere. VINITI. Deposit, no. 2973-V86, 22 April 1986. (IVUFA, no. 10, 1986, 126).

434. Ivanov, A.P.; Osipenko, F.P.; Chaykovskiy, A.P.; Shcherbakov, V.N. (). Study on the spectral dependencies of backscatter coefficients and microstructure of aerosols in an atmospheric boundary layer. Optika atmosfery i aerozol'. IFA. Moskva, Nauka, 1986, 108-124.

435. Kargin, B.A.; Starkov, A.V. (VTsSOAN). Asymptotic optimization of statistical modeling in problems of atmospheric optics. VTsSOAN. Preprint, no. 632, 1986, 28 p. (RZFZA, 86/9L822).

436. Klementov, A.D.; Morozov, N.V.; Sagitov, S.I.; Sergeyev, P.B. (FIAN). Beam strength at the surface of optical materials and mirrors at a wavelength of 248 and 193 nm. KVEKA, no. 10, 1986, 2141-2144.

437. Komlyakov, V.V.; Apurin, V.V.; Belov, V.A.; Zhitenev, I.P.; Samsonov, G.A.; Filimonov, Yu.V. (). Device for visualizing light signals [from a laser in the atmosphere]. OTIZD, no. 12, 1986, 1221764. (RZRAB, 86/9Ye776).

438. Kraynov, V.P.; Lebedev, G.P.; Nazaryan, A.O.; Smirnov, B.M. (ITF). Gas dynamics of ball lightning. ZTEFA, no. 9, 1986, 1791-1796.

439. Krekov, G.M.; Rakhimov, R.F. (). Model approximation of the measured spectra of particle size in atmospheric haze for estimating the parameters of aerosol light scattering. VINITI. Deposit, no. 2577-V86, 9 April 1986. (IVUFA, no. 9, 1986, 128).

440. Kuznetsov, V.I.; Migulin, A.V.; Pryalkin, V.I.; Razumikhina, T.B.; Kholodnykh, A.I. (). Lay-out moisture measurements by PGL-lidar. ZPSBA, vol. 45, no. 3, 1986, 468-473.

441. Loskutov, V.S.; Strelkov, G.M. (). Optical field in the vicinity of a water drop at 1.06 and 2.36 um. OPSPA, vol. 61, no. 3, 1986, 566-569.

442. Loskutov, V.S.; Strelkov, G.M. (). Optical field in the vicinity of a water drop at 1.06 and 2.36 um. OPSPA, vol. 61, no. 4, 1986, 875-879.

443. Milyutin, Ye.R.; Pogosyan, K.P.; Taklaya, A.A. (TPI; IFI). Measurement of the normalized variance of laser beam wandering in a turbulent atmosphere. KVEKA, no. 10, 1986, 2115-2117.

444. Mirzayev, A.T.; Mamatkulov, M.N.; Rasulov, I.K. (TashGU). Statistics of photocounts of laser radiation transmitted through a turbulent atmosphere. KVEKA, no. 10, 1986, 2123-2125.

445. Patrushev, G.Ya.; Petrov, A.I. (IOA). Fluctuation statistical characteristics of the intensity of optical beams in a turbulent rainy atmosphere. IFAOA, no. 10, 1986, 1050-1059.

446. Patrushev, G.Ya.; Petrov, A.I.; Pokasov, V.V. (). Statistical characteristics of intensity fluctuations during ranging of corner reflectors in a turbulent atmosphere. OPSPA, vol. 61, no. 3, 1986, 587-590.

447. Silant'yev, A.Yu. (IPMe). Divergence of laser radiation at an electron concentration gradient in a continuous optical discharge. ZTEFA, no. 9, 1986, 1811-1813.

448. Veretennikov, V.V.; Kabanov, M.V.; Panchenko, M.V. (IOA). Microphysical interpretation of a single-parametric model of polarization functions. IFAOA, no. 10, 1986, 1042-1049.

449. Vergun, V.V.; Kirilov, A.Ye.; Kokhanenko, G.P.; Kruglyakov, V.L.; Krutikov, V.A. (). Use of a copper vapor laser to observe time-dependent distortions of scattered radiation. VINITI. Deposit, no. 2568-V86, 9 April 1986. (IVUFA, no. 9, 1986, 126).

450. Voyshtillo, N.A.; Shcherbakova, N.I.; Matveyeva, Ye.S. (). Comparative measurement of the transmission of spontaneous and coherent radiation by opal glass. IZTEA, no. 9, 1986, 29-31.

451. Yelkin, N.N.; Likhanskiy, V.V.; Napartovich, A.P. (IAE). Effect of radiation diffraction on amplification by transverse active medium flow. KVEKA, no. 10, 1986, 2109-2114.
452. Zakharov, S.M.; Lysak, Yu.D.; Manykin, E.A.; Morozov, D.A. (MIFI). Propagation of laser radiation in the atmosphere under thermal self-action conditions. MIFI. Preprint, no. 18, 1986, 14 p. (RZFZA, 86/9L833).
453. Zakharov, Yu.N.; Korolev, I.Ya.; Sorokin, Yu.M.; Finkel'shteyn, S.Ye. (GGU). Study on the structure and parameters of optical breakdown of aerosols in the millimeter and optical ranges. VINITI. deposit, no. 5243-V, 17 Jul 1986, 31-35. (RZFZA, 86/10L1097).

3. Propagation in Liquids

454. Gol'din, Yu.A.; Yevdoshenko, M.A. (IOAN). Study on spatial variation of the hydrooptic characteristics in frontal zones of the ocean. OKNOA, no. 5, 1986, 761-762.
455. Kolesnik, A.I.; Ivanov, A.P. (IFANB). Effect of absorption by a disperse medium on the depolarization of laser radiation. DBLRA, no. 9, 1986, 796-798.
456. Spivak, A.V. (NII Tavtoprom). Interaction of c-w CO₂ laser radiation with liquids. DANKA, vol. 290, no. 5, 1986, 1107-1111.
457. Zakharov, A.K.; Gol'din, Yu.A. (IOAN). Monte-Carlo calculation of the structure of narrow transient light beams in seawater of large optical depth. IFAOA, no. 5, 1986, 533-540.

4. Adaptive Optics

458. Andreyev, A.A.; Shatsev, A.N. (). Numerical simulation of wave front reversal under stimulated Brillouin scattering in a laser plasma. KVEKA, no. 9, 1986, 1930-1933.
459. Androsov, A.M.; Bureyev, V.A.; Vygon, V.G.; Malikov, S.N. (). Construction of images of astronomic objects by coherence functions. OPSPA, v. 60, no. 4, 1986, 863-864.
460. Bakut, P.A.; Pakhomov, A.A.; Ryakhin, A.D.; Sviridov, K.N.; Ustinov, N.D. (). Interrelationship between spatial spectrum components of finite function in the two-dimensional case. OPSPA, v. 60, no. 4, 1986, 788-791.

461. Bakut, P.A.; Ryakhin, A.D.; Sviridov, K.N.; Ustinov, N.D. (). Statistical model and spatial spectrum of distorted atmospheric optical images of astronomic objects. IVYRA, no. 3, 1986, 274-280.
462. Bakut, P.A.; Vol'pov, A.L.; Zimin, Yu.A. (). Optimal processing of vector optical fields under conditions of atmospheric distortion. RAELA, no. 7, 1986, 1336-1343.
463. Belousova, I.M.; Liukonen, R.A.; Mak, A.A.; Trofimenko, A.M. (). Experimental realization of wave front reversal under stimulated Brillouin scattering in a high temperature plasma. PZTFD, no. 20, 1986, 1263-1267.
464. Berman, G.P.; Iomin, A.M.; Kolovskiy, A.R.; Tarkhanov, N.N. (IFSOAN). Dynamics of four-wave interactions in a nonlinear quantum network. IFSOAN. Preprint, no. 377F, 1986, 45 p. (RZFZA, 86/9Ye18).
465. Bespalov, V.I.; Matveyev, A.Z.; Pasmanik, G.A. (IPF). Investigation of the limiting sensitivity of a stimulated Brillouin scattering amplifier and four-wave hypersonic phase-conjugate mirror. IVYRA, no. 9, 1986, 1080-1094.
466. Betin, A.A.; Dyatlov, A.I.; Kulagina, S.N.; Milovskiy, N.D.; Rusov, N.Yu. (IPF). Degenerate four-wave mixing in a resonant medium taking into account pumping wave variations. KVEKA, no. 10, 1986, 1975-1980.
467. Betin, A.A.; Zhukov, Ye.A.; Mitropol'skiy, O.V. (IPF). Large coefficients of reflection during the four-wave mixing of CO₂ laser radiation in liquids. PZTFD, no. 17, 1986, 1052-1056.
468. Karpukhin, S.N. (). Possibility of radiation wavefront correction under non-steady state stimulated emission from a laser with a plane resonator. KVEKA, no. 10, 1986, 2130-2132.
469. Kovalev, V.I.; Kovalenko, K.V.; Suvorov, M.B.; Shmelev, A.K. (FIAN). Reflection efficiency in a wave front reversal scheme under four-wave interaction with a passive optical polarization isolator at 10.6 um. KVEKA, no. 9, 1986, 1885-1890.
470. Kuz'minskiy, A.L.; Shmal'gauzen, V.I. (MGU). Piezoelectric deflector of laser radiation. PRTEA, no. 5, 1986, 207-208.

471. Kuzne, V.S.M.; Ushakov, N.G. (). Numerical reconstruction of wavefronts by intensity distribution. ZVMFA, no. 7, 1986, 1110-1115. (RZFZA, 86/10L529).

472. Lukin, V.P. (). Dynamic characteristics of forecasting adaptive optical systems. RAEIA, no. 9, 1986, 1808-1812.

473. Mironenko, S.I. (). Method for transmitting an optical signal through an inhomogeneous turbulent layer. OTIZD, no. 7, 1986, 1213461. (RZRAB, 86/9Ye456).

474. Panecki, P. (). Reconstruction of a light field in a cyclical optical system. Prace Instytutu fizyki, Politechnika Warszawska, no. 29-30, 1985, 253-260. (RZFZA, 86/9L585).

475. Spevak, I.S. (). Wave front reversal under stimulated scattering of two light beams differing in spatial modulation intensity. OPSPA, vol. 61, no. 3, 1986, 598-601.

476. Zaskal'ko, O.P.; Zozulya, A.A.; Panaioti, N.N.; Tikhonchuk, V.T. (FIAN). Self-reversal of a light beam under parametric stimulated Brillouin scattering. KRSFA, no. 8, 1986, 43-45.

D. COMPUTER TECHNOLOGY

477. Boyarchuk, K.A.; Volyak, K.I.; Malyarovskiy, A.I.; Miridonov, S.V. (IOF). Use of the PRIZ modulator for optical analysis of marine radio images. KRSFA, no. 7, 1986, 5-6.

478. Bulatov, Ye.D.; Milyayev, V.A.; Nikitin, V.A.; Shirkov, A.V. (IOF). Automation of a microwave relaxometer based on a CAMAC standard with the aid of an IZOT TSLANP-0270 computer system. PRTEA, no. 5, 1986, 61-63.

479. Pilipovich, V.A.; Kholodok, N.L.; Shcherbak, Yu.M. (). Study on forming alphanumeric characters by semiconductor injection laser radiation controlled by an acoustooptic deflector. VBSFA, no. 2, 1986, 31-35. (RZFZA, 86/9L705).

480. Vasil'yev, V.V. (LGU). Multichannel optical analyzers using photosensitive charge-coupled-device matrixes. VINITI. Deposit, no. 4806-V, 2 Jul 1986, 7 p. (RZRAB, 86/10Ye354).

E. HOLOGRAPHY

481. Badalyan, A.M.; Bondarev, B.V.; Donin, V.I.; Timofeyev, T.T. (IAESOAN). High-power argon laser for holography applications. KVEKA, no. 9, 1986, 1917-1919.
482. Barmenkov, Yu.O.; Zosimov, V.V.; Kozhevnikov, N.M.; Lyamshev, L.M.; Segushchenko, S.A. (AKIN; LPI). Investigation of small ultrasonic vibrations by means of optical dynamic holography. DANKA, vol. 290, no. 5, 1986, 1095-1098.
483. Belyachits, A.Ch.; Kukharchik, P.D.; Semenchik, V.G. (). Holographic system with a receiving aperture having a circular shape. RAELA, no. 9, 1986, 1839-1847.
484. Bykovskiy, Yu.A.; Zarubin, A.M.; Larkin, A.I. (MIFI). Properties and applications of partially coherent holography. KVEKA, no. 9, 1986, 1770-1784.
485. Churayev, A.L.; Stasel'ko, D.I. (). Light scattering by silver-halide photomaterials for holography. Light scattering functions on microcrystals and an emulsion surface relief. OPSPA, vol. 61, no. 3, 1986, 591-597.
486. Gal'pern, A.D.; Paramonov, A.A.; Selyavko, L.V.; Smayev, V.P.; Solomatin, Yu.V.; Shelekhov, N.S. (GOI). Recording and copying of rainbow holograms of pseudocolor images. OPMPA, no. 4, 1986, 36-38.
487. Grishanov, A.N.; De, S.T.; Denezhkin, Ye.N.; Khandogin, V.A. (). Automated digital treatment and the recording of holographic interferograms. AVMEB, no. 5, 1986, 37-46.
488. Grodzinskaya, M.D.; Savchuk, A.V.; Sal'kova, Ye.N.; Soskin, M.S. (). Holographic recording in thin films of organic compounds. Fizika molekulyarnykh kristallov. IFANUK. Kiyev, Naukova dumka, 1986, 175-183. (RZFZA, 86/10L722).
489. Gusev, V.G.; Lazarev, S.V. (GOI). Holographic method of the control of objectives and lenses. OPMPA, no. 9, 1986, 8-10.
490. Idiatulin, V.S. (VNIFTRI). Dynamic holography of ultrashort light pulses. KVEKA, no. 9, 1986, 1820-1827.

491. Khramovich, Ye.M.; Shepelevich, V.V. (). Mutual transformation of electromagnetic waves by transmission holograms recorded in optically active photorefractive cubic crystals, allowing for the external electric field. Kovariantnye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 142-150. (RZRAB, 86/10Ye530).
492. Kiseleva, O.V. (MEI). Using ellipsometry for hologram synthesis. MEI. Nauchnye trudy, no. 60, 1985, 143-147. (RZRAB, 86/9Ye796).
493. Kiselevskiy, L.I.; Kurunov, R.F.; Mazurenko, S.L.; Makarevich, A.N.; Smirnov, V.G.; Solov'yanchik, D.A. (). Investigation of the anode region of atmospheric pressure glow discharge in a helium flow by holographic interferometry methods. ZPSBA, vol. 45, no. 3, 1986, 494-497.
494. Kuz'menko, A.V.; Koblyanskiy, Yu.V. (). Method of synthesis of two-phase digital holograms. OPSPA, vol. 61, no. 4, 1986, 845-851.
495. Lapides, A.A. (). Coherent optical method for analyzing the directivity of acoustic fields by using signal recording in the form of shadow graphics. AVMEB, no. 1, 1986, 61-65.
496. Makhmutov, E.G. (INBYuM). Holographic method for visualizing phase inhomogeneities. UFIZA, no. 9, 1986, 1346-1349.
497. Platonov, Ye.M. (GOI). Holographic system for the investigation of phase discontinuities. OPMPA, no. 10, 1986, 34-35.
498. Saari, P.M. (). Spectral memory. IANFA, no. 4, 1986, 751-756. (RZFZA, 86/9L763).
499. Safronov, G.S.; Chernyavskiy, A.G. (). Estimation of the effect of the digitalization of radioholograms on the energy characteristics of images reconstructed according to the holograms. RAEIA, no. 9, 1986, 1859-1863.
500. Sarnadskiy, V.N. (). System of digital analysis of fields of non-homogeneous deformations based on superimposed holographic interferometers. AVMEB, no. 5, 1986, 46-54.

501. Stasel'ko, D.I.; Churayev, A.L. (). Light scattering by silver-halide materials for holography. Effect of noise holograms and spectrograms. OPSPA, vol. 61, no. 4, 1986, 828-834.
502. Tereshchenko, Ye.D. (). Determining the altitude of ionospheric inhomogeneities by radioholography. GEAEA, no. 3, 1986, 413-415. (RZFZA, 86/9Zh276).
503. Trofimov, G.S.; Stepanov, S.I. (FTI). Non-steady-state holographic currents in photoreactive crystals. FTVTA, no. 9, 1986, 2785-2789.
504. Yevtikhiyev, N.N.; Mirovitskiy, D.I.; Rostovtseva, N.V.; Serov, O.B. (MIREA). Multilayer holographic functional element in an analog-digital converter. KVEKA, no. 9, 1986, 1794-1800.
505. Zel'dovich, B.Ya.; Shkunov, V.V.; Yakovleva, T.V. (IPMe). Speckle field holograms. UFNAA, vol. 149, no. 3, 1986, 511-549.
506. Zhilkin, V.A.; Zinov'yev, V.B. (). Determination of a fringe effect zone by means of a holographic moire method. ZPMFA, no. 5, 1986, 132-135.

F. LASER-INDUCED CHEMICAL REACTIONS

507. Akhromeyeva, T.S.; Bunkin, F.V.; Kirichenko, N.A.; Kurdyumov, S.P.; Malinetskiy, G.G.; Samarskiy, A.A. (IPM). Periodic self-oscillating wave processes and diffuse chaos in laser thermochemistry. IPM. Preprint, no. 41, 1986, 32 p. (RZFZA, 86/10L1131).
508. Al'minderov, V.V.; Milikh, G.M.; Trakhtenberg, L.I. (NIFKhI). Effect of collisions on the dynamics of laser-induced conversions in polyatomic molecules. DANKA, v. 288, no. 2, 1986, 401-405.
509. Antonov, V.S.; Letokhov, V.S.; Moskovets, Ye.V. (). Laser stimulated desorption of ions in a strong electric field. IANFA, no. 4, 1986, 690-694. (RZFZA, 86/9L440).
510. Bagratashvili, V.N.; Burimov, V.N.; Ionov, S.I.; Putilin, F.N.; Sviridov, A.P.; Turovets, I.M. (MGU). IR laser photolysis of $[CF_3]_3Cl$. Obtaining high concentrations of $[CF_3]_3C$. VMUKA, no. 5, 1986, 470-473.

511. Bagratashvili, V.N.; Ionov, S.I.; Kuz'min, M.V.; Letokhov, V.S. (NITsTLAN). Strong vibrational over-excitation above the dissociation threshold and the monomolecular decay of a large $[CF_3]_3Cl$ molecule in an infrared laser field. ZETFA, vol. 91, no. 3, 1986, 766-778.
512. Belov, A.L.; Kraynov, V.P. (). Using a Rabi model to calculate two-photon ionization of hydrogen-like ions in a strong electromagnetic radiation field. Metody vychislitel'noy fiziki i ikh prilozheniya. MIFI. Moskva, Energoatomizdat, 1986, 17-21. (RZFZA, 86/10L111).
513. Bunkin, F.V.; Kirichenko, N.A.; Kurdyumov, S.P.; Potapov, A.B.; Samarskiy, A.A. (IPM). Self-oscillating wave processes. IPM. Preprint, no. 43, 1986, 28 p. (RZFZA, 86/9I441).
514. Gol'denberg, M.Ya.; Kapralova, G.A.; Umanskiy, S.Ya.; Chaykin, A.M. (IKhF). Role of the oscillating excitation of molecules in association reactions. KHFID, no. 10, 1986, 1316-1321.
515. Khannanov, N.K.; Kuz'min, V.A.; Levin, P.P.; Shafirovich, V.Ya.; Yablonskaya, Ye.Ye. (IKhF). Efficiency of the spatial separation of charges in a vesicular system: $Ru(bpy)_3^{2+}$ (inner solution)- $C_{18}V^{2+}$ (membrane)-oxidizing agent(outer solution). KHFID, no. 10, 1986, 1358-1365.
516. Kurdoglyan, M.S.; Orayevskiy, A.N. (FIAN). Stimulated light scattering in a chemically active medium with the proceeding of a chain reaction mechanism. KVEKA, no. 10, 1986, 2051-2056.
517. Kuz'mina, N.P.; Matveyets, Yu.A.; Khoroshilova, Ye.V. (ISAN). Photochemical synthesis of alanine under ultraviolet stimulation of high electron states of ammonium acrylate. KHFID, no. 9, 1986, 1168-1171.
518. Ungureanu, C.; Chirtoc, M.; Moldovan, Z.; Fareasan, M. (). Multiphoton selective IR dissociation of deuterated chlorodifluoromethane. SCEFA, no. 2, 1986, 161-182. (RZFZA, 86/10L272).
519. Velichko, A.M.; Gordon, Ye.B.; Nadeykin, A.A.; Nikitin, A.I.; Tal'roze, V.L. (IKhF). Multiphoton dissociation and fragmentation of C_2F_5I molecules. KHVKA, no. 5, 1986, 468-471.

520. Yankov, P.; Saltiel, S.; Petkov, I.; Markov, P. (). Study on the relaxation rate of the transient form of the photoexcited enol form of dibenzoyl methane (in English). *Bolgarskiy fizicheskiy zhurnal*, no. 6, 1985, 629-633. (RZFZA, 86/9L329).

521. Zhitneva, G.P.; Faustov, V.I.; Pshezhetskiy, S.Ya. (NIFKhI). Course of the reaction of single molecular elimination of hydrogen in C₂H₅OH vapors under the action of pulsed infrared CO₂ laser radiation. *KHVKA*, no. 5, 1986, 477-479.

522. Zhitneva, G.P.; Pshezhetskiy, S.Ya. (NIFKhI). Mechanism of ethanol conversion under the action of CO₂ laser infrared pulsed radiation. *DANKA*, vol. 290, no. 4, 1986, 876-880.

G. MEASUREMENT OF LASER PARAMETERS

523. Antonov, Ye.N.; Mishke, B.A.; Przhevskiy, S.S.; Serdyukova, O.A.; Fetisov, S.P.; Shelemin, Ye.B.; Yakovlev, V.A. (). Instrument for measuring the relative distribution of the radiation density of industrial lasers. *IZTEA*, no. 10, 1986, 19-20.

524. Avanesyan, S.M.; Zheludev, N.I.; Zadoyan, R.S.; Saltiel, S.M.; Parashikov, I.Kh. (). Device for measuring the rotation of the plane of polarization of laser radiation. Author's certificate Bulgaria, no. 37642, 30 Jul 1985. (RZRAB, 86/9Ye619).

525. Belozertsev, A.N.; Markov, N.N.; Novikov, N.I. (). Analysis of the accuracy of the reproduction of the base line power axis of laser radiation. *IZTEA*, no. 9, 1986, 18-20.

526. Bojarski, A.; Kube, E.; Leidenberger, G. (). Method for measuring the spectral distribution of power of radiation sources. Patent GDR, no. 230633, 4 Dec 1985. (RZRAB, 86/9Ye620).

527. Golubev, A.D.; Krupkin, V.Kh.; Levit, A.L.; Neudachin, A.V. (). Stability of the axis position in the directional pattern of periodic single-pulsed lasers. *IVUBA*, no. 6, 1986, 70-72. (RZRAB, 86/10Ye88).

528. Govor, I.N.; Kubarev, A.V.; Ozolin, V.V. (). Operating standard unit of the active power of laser radiation at 0.48 and 10.6 μ m wavelengths. *IZTEA*, no. 9, 1986, 15-18.

529. Ivanchenko, A.I.; Shepelenko, A.A. (ITPM). Device for measuring the intensity distribution of radiation. OTIZD, no. 10, 1986, 646774. (RZRAB, 86/10Ye393).

530. Ivanov, A.V.; Kandidov, V.P.; Krindach, D.P.; Sokolov, V.N. (MGU). Diffraction method of measuring the spatial coherence function of a non-steady optical field. IVYRA, no. 10, 1986, 1176-1181.

531. Janszky, J. (Yanski, I.); Corradi, G. (Korradi, G.); Horvath, Z. (Khorvat, Z.) (from Hungary); Arakelyan, S.A.; Gyuzalyan, R.N.; Sogomonyan, S.B. (IFI). The KIP correlation meter to measure the duration of picosecond light pulses. KVEKA, no. 10, 1986, 2158.

532. Kirilenko, Ye.K.; Rogulyak, S.V.; Markov, V.B. (IFANUK). Device for the control of the spectral characteristics of laser radiation. PRTEA, no. 5, 1986, 169-171.

533. Klimkov, Yu.M.; Kuz'mina, T.I. (MEI). Models of laser beams used for designing optical systems. MEI. Nauchnyye trudy, no. 60, 1985, 134-138. (RZRAB, 86/9Ye23).

534. Krisyuk, V.Ya.; Sosenko, L.N. (KhGU). Vibration-resistant ponderomotor instrument to measure high energies of optical radiation. KhGU. Vestnik, no. 285, 1986, 70-71. (RZFZA, 86/10L977).

535. Kubarev, A.V.; Maksimov, V.N. (). Stabilization of output power in gas lasers. Impul'snaya fotometriya, no. 9, Leningrad, 1986, 95-97. (RZRAB, 86/9Ye214).

536. Leidenberger, G. (). Method for optical power measurement. Patent GDR, no. 230632, 4 Dec 1985. (RZRAB, 86/9Ye604).

537. Mazurenko, Yu.T. (). Ultrafast scanning of light beams and possibility of pico-femtosecond chronophotography. OPSPA, v. 60, no. 3, 1986, 551-558.

538. Mironov, A.V.; Krylov, P.S. (VNIIIM). Device for the measurement and stabilization of temperature in an extension of an absorbing cell of a laser. PRTEA, no. 5, 1986, 224-227.

539. Pakhomov, I.I. (MEI). Calculating the distortions of laser beams in an optical system. MEI. Nauchnyye trudy, no. 60, 1985, 125-129. (RZRAB, 86/9Ye22).

- 540. Rzepka, J. (). Instrument for measuring laser radiation power. Patent Poland, no. 130282, 15 Feb 1986. (RZRAB, 86/9Ye603).
- 541. Suseenko, L.N.; Krisyuk, V.Ya.; Kokodiy, N.G. (KhGU). Method for signal recording in a mechanotron instrument for measuring the energy of optical radiation. KhGU. Vestnik, no. 285, 1986, 72-74. (RZFZA, 86/10L978).
- 542. Voronich, V.Ye.; Gachko, G.A.; Maskevich, S.A. (GrodGU). Power stabilization of the radiation of an LTI-701 laser. PRTEA, no. 5, 1986, 167-168.
- 543. Voropay, Ye.S.; Dmitriyev, S.M.; Yermalitskiy, F.A. (NIIPFP). Time analysis unit for single-quantum spectrophotometry. PRTEA, no. 3, 1986, 243.

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

- 544. Akhmet'yev, M.A.; Noskov, M.F. (NIIGAiK). Study on the saturation of photodetectors to improve the accuracy of dual-beam interferometers. NIIGAiK. Trudy, no. 25/65, 1985, 66-73. (RZFZA, 86/9L606).
- 545. Alekseyev, A.D.; Kolosnitsyn, N.I. (). Selecting optimal designs and parameters for laser interferometric gravitational wave antennas. CRSSIDGV, Dubna, 25-27 Jun 1985. Trudy. Dubna, 1985, 50-54. (RZRAB, 86/9Ye738).
- 546. Alekseyev, A.D.; Kolosnitsyn, N.I. (). Possibility for detection of gravitational radiation in the microwave range by a laser interferometric detector. CRSSIDGV, Dubna, 25-27 Jun 1985. Trudy. Dubna, 1985, 45-49. (RZRAB, 86/9Ye741).
- 547. Aleshin, N.P.; Volkov, S.A.; Martynenko, S.V. (). Light probing study on the radiation field of a disk ultrasonic transducer with a tomographic miscount. DEFKA, no. 6, 1986, 41-46. (RZRAB, 86/10Ye484).
- 548. Andreyeva, T.V.; Tolmachev, V.A. (GOI). Methodological aspects of an ellipsometric experiment using optical materials. OPMPA, no. 10, 1986, 36-39.
- 549. Angel'skiy, O.V.; Maksimyak, P.P.; Polyanskiy, V.K. (ChGU). Method for measuring the refractive index of scattering media. OTIZD, no. 7, 1986, 1213397. (RZFZA, 86/9L739).

550. Averin, V.I.; Komarov, S.A.; Deverilin, Yu.A.; Saulevichyus, V.; Sokol'nikov, I.A.; Soloveychik, Yu.B. (VNIIOFI). The Agat-SF5 electrooptic x-ray photochronograph. PRTEA, no. 3, 1986, 248-249.

551. Bakhtin, V.G.; Kudrin, A.B. (MISIS). Computer-obtained quantitative data in holographic interferometry of diffusely reflecting objects. Chermetinform. Deposit, no. 3413-ChM, 10 Jun 1986, 25 p. (RZFZA, 86/9P220).

552. Balkarey, Yu.I.; Sandomirskiy, V.B. (IRE). Nonlinear Fabry-Perot interferometer as an optical medium for waves propagating parallel to reflecting planes. KVEKA, no. 9, 1986, 1911-1913.

553. Belinskiy, A.V.; Chirkin, A.S. (). Transfer function of a Fabry-Perot interferometer. OPSPA, v. 60, no. 4, 1986, 839-842.

554. Belkin, V.S.; Sannikov, B.P.; Sokolov, V.G.; Timoshin, I.Ya. (IYaFSOAN). Instrument for the measurement of the direction of magnetic force lines. PRTEA, no. 5, 1986, 177-179.

555. Belyayev, V.K.; Podvyaznikov, V.A.; Prokhorov, A.M.; Shchelev, M.Ya.; Chevokin, V.K. (). EOK-Frame electro-optic camera (advertisement). KVEKA, no. 9, 1986, 1951.

556. Berezina, Ye.Ye.; Levenberg, V.A. (). Measurement of glass refractive index by three-beam interferometry and Talbot bands. OPSPA, vol. 61, no. 4, 1986, 713-715.

557. Bogatyrenko, K.I. (). Threshold processing of optical signals in angle-code converters with scanning. IZTEA, no. 9, 1986, 24-25.

558. Borisova, L.B.; Mel'nikov, V.N. (). Laser interferometer measurements of small variations in the earth's gravitational field. CRSSIDGV, Dubna, 25-27 June 1985. Trudy. Dubna, 1985, 111-118. (RZGFA, 86/10G345).

559. Budziak, A.; Kedzierski, W. (). Device for recording charged particle tracks by means of a streamer chamber and nonstandard variant of dual-beam interferometry. Patent Poland, no. 132455, 30 Dec 1985. (RZRAB, 86/9Ye730).

560. Burkov, V.I.; Balabanov, D.Ye.; Kotov, V.A.; Semin, G.S. (MFTI). Uniaxial magnetic anisotropy and spectra of the magnetic circular dichroism of films of garnet ferrites. ZTEFA, no. 10, 1986, 2073-2075.

561. Burmakov, A.P.; Kolesnik, A.V.; Zhumar', A.Yu. (). Interferometry method of the measurement of a coefficient of radiation transmission by matter. ZPSBA, vol. 45, no. 4, 1986, 644-647.

562. Chupanov, A.I. (). Speeding up mine surveying productivity. GZKGA, no. 9, 1986, 58-60.

563. Daszkiewicz, M. (). Device for photoelectric analysis of diffraction patterns. Patent Poland, no. 126449, 28 Jun 1985. (RZRAB, 86/9Ye626).

564. Dudnikov, V.G.; Shabalin, A.L. (IYaFSOAN). Electrohydrodynamic source of ions. PRTEA, no. 5, 1986, 149-152.

565. Eberhardt, V.; Hofmann, R.; Schmidt, J.P.; Fuchs, J.; Bergner, R. (). Device for recording the position of light beams. Patent GDR, no. 233209, 19 Feb 1986. (RZRAB, 86/10Ye305).

566. Georgobiani, A.N.; Kotlyarevskiy, M.B.; Leont'yeva, O.V.; Pegov, A.A. (FIAN). Intrinsically defective electrically active acceptor centers in p-type zinc selenide. KRSFA, no. 6, 1986, 21-23.

567. Glukhov, L.M.; Lisina, O.K. (MISIS). Quantitative determination of vibration fields in ultrasonic systems by holographic interferometry. Chermetinform. Deposit, no. 3414-ChM, 10 Jun 1986, 8 p. (RZFZA, 86/9P219).

568. Goebel, W.; Mueller, W.; Schilling, E. (). Lightguide device for reflected signals in devices for surface scanning by light beam as well as testing method for its own use. Patent GDR, no. 230726, 11 Dec 1985. (RZRAB, 86/10Ye450).

569. Golosov, V.P.; Grachev, Ye.M.; Knorre, K.G.; Potapov, O.A. (). Prospects for using fiberoptic technology in seismic prospecting. Novyye razrabotki v oblasti detaley geofizicheskikh issledovaniy na neft' i gaz. Moskva, 1985, 63-68. (RZRAB, 86/9Ye775).

570. Golov, V.S.; Desyatikh, Yu.M.; Fedorov, A.S.; Paramonov, A.G. (). Laser system for automating a topographical survey of an area. GZKGA, no. 10, 1986, 38-41.

571. Gorelik, V.S.; Tochilin, S.D. (FIAN). Inelastic low-frequency opalescence in electric field-induced single-domain lithium tantalate crystals. KRSFA, no. 6, 1986, 18-20.

572. Gorshkov, B.G.; Kuzin, A.Yu.; Kutakhov, V.P. (). Multipass ring fiberoptic interferometers. RATEA, no. 5, 1986, 90-92. (RZRAB, 86/9Ye463).

573. Gorshkov, V.A.; Fomin, O.N.; Gorlov, S.N. (GOI). Photoelectric interferometer for the control of the shape of surfaces of large-scale optical components. OPMPA, no. 10, 1986, 31-34.

574. Greym, I.A.; Karpova, G.V. (). Optical method for measuring short distances by joined sections. IVUBA, no. 6, 1986, 55-59. (RZRAB, 86/10Ye412).

575. Gumennik, Ye.V.; Yevtikhiev, O.A.; Rinkevichyus, B.S.; Chashechkin, Yu.D. (). Joint use of qualitative and quantitative refractometric methods. INFZA, v. 50, no. 4, 1986, 597-604. (RZFZA, 86/9L738).

576. Gumennik, Ye.V.; Yevtikhiev, O.A.; Rinkevichyus, B.S. (MEI). Study on the spatial structure of flows by refractometric methods. MEI. Nauchnyye trudy, no. 60, 1985, 96-102. (RZRAB, 86/9Ye627).

577. Izmaylov, G.N.; Parakin, V.Ye. (). Interferometer to test the principle of equivalence for photons. Eksperimental'nyye i teoreticheskiye voprosy prikladnykh fizicheskikh issledovaniy. Moskva, 1985, 6-10. (RZFZA, 86/9A110).

578. Jiracek, M. (). Optical gyroscope. JMKO, no. 4, 1986, 99-104. (RZRAB, 86/10Ye519).

579. Katulin, V.A.; Malov, A.N. (). Laser control and measuring systems: problems and prospects. VANSA, no. 6, 1986, 52-62. (RZFZA, 86/10A44).

580. Kerstan, F. (). Device for recording laser-controlled electric pulses. Patent GDR, no. 232980, 12 Feb 1986. (RZRAB, 86/10Ye391).

581. Kitayev, N.P.; Shipilov, K.F.; Shmaonov, T.A. (IOF). Measurement of kinetic mobility in a stratified solution with a low critical point. KRSFA, no. 10, 1986, 33-35.

582. Klimkin, V.F. (NGU). Development of the electrical breakdown of n-hexane in the micronanosecond range. ZTEFA, no. 10, 1986, 2041-2043.

583. Klochkov, V.P.; Korsakov, Ye.G.; Verkhovskiy, Ye.B. (). Measurement of absorption cross-section for the lower excited singlet states of complex molecules. OPSPA, vol. 61, no. 4, 1986, 761-765.

584. Kolin'ko, V.G.; Poroshina, M.Yu.; Priyezzhev, A.V. (MEI). Doppler probing of liquid flows in channels with optically inhomogeneous walls. MEI. Nauchnyye trudy, no. 60, 1985, 102-108. (RZRAB, 86/9Ye678).

585. Kosenko, N.K.; Martyukhina, L.I.; Pivovar, N.I.; Popov, I.A.; Sakyani, A.S.; Starchenko, A.N.; Filippov, O.K. (GOI). Device for energy calibration of optical radiation detectors with a clear aperture up to 450 mm. PRTEA, no. 3, 1986, 245.

586. Kovalev, A.M.; Kostyukovich, Ye.A. (IFANB). Device for measuring the characteristics of particles in a disperse medium. OTIZD, no. 7, 1986, 1173884. (RZFZA, 86/10A164).

587. Kukhtarev, N.V.; Dovgalenko, G.Ye. (IFANUk). Holographic interferometry in photorefractive crystals. IFANUk. Preprint, no. 5, 1986, 19 p. (RZFZA, 86/9L771).

588. Kul'chin, Yu.N.; Obukh, V.F. (DVGU). Hydrostatic pressure measurement by a multimode optical fiber. IVYRA, no. 10, 1986, 1238-1243.

589. Kul'chin, Yu.N.; Obukh, V.F. (DalPI). Optoelectronic method for processing signals of fiberoptic hydrostatic pressure sensors. VINITI. Deposit, no. 4720-V, 30 Jun 1986, 9 p. (RZFZA, 86/10A146).

590. Kul'chin, Yu.N.; Obukh, V.F. (DalPI). Study on phase modulation of modes in optical fiber under the action of hydrostatic pressure. VINITI. Deposit, no. 4721-V, 30 Jun 1986, 11 p. (RZFZA, 86/10L53).

591. Kulikova, N.I.; Perebyakin, V.A.; Etsin, I.Sh. (GOI). Beam position stability of LGN-207A and LGN-208A laser radiation. OPMPA, no. 9, 1986, 56-57.

592. Kupriyanova, Ye.B.; Mit'ko, S.V.; Sychev, I.A. (FIAN). Propagation of waves excited by a modulated ion flux in a plasma. KRSFA, no. 5, 1986, 11-13.

593. Lyubinskaya, R.I.; Mardezhov, A.S.; Rezvyy, R.R.; Shvets, V.A. (). Determining the parameters of absorptive films on a complex substrate from immersion ellipsometric measurement data. UFIZA, no. 4, 1986, 525-530. (RZFZA, 86/10L43).

594. Mandrosov, V.I.; Nekrasov, A.I.; Yakushkin, I.G. (IFA). Statistical characteristics of coherent optical images of randomly rough surfaces. IVYRA, no. 10, 1986, 1273-1275.

595. Mitrofanov, V.P.; Ponomareva, O.I. (MGU). Use of a torsion pendulum for the measurement of dielectric losses. PRTEA, no. 5, 1986, 186-188.

596. Mogilko, V.A.; Shcherbina, Yu.A. (MEI). Using laser Doppler velocimeters in studies on turbulent mixing processes. MEI. Nauchnyye trudy, no. 60, 1985, 108-112. (RZRAB, 86/9Ye680).

597. Mokhov, A.V.; Nefedov, A.P. (). Effect of chemical reactions on the determination of the sodium atom concentration in flames by a resonance fluorescence method. ZPSBA, vol. 45, no. 3, 1986, 491-494.

598. Mytsyk, B.G. (SKBMvP). New possibilities for the use of crystals in optical thermometry. ZVDLA, no. 9, 1986, 51-53.

599. Polyakov, A.F.; Shindin, S.A. (IVTAN). Turbulent transfer of momentum and heat under mixed convection in vertical channels. TVYTA, no. 5, 1986, 1031-1033.

600. Polyakov, L.; Sorokin, A.; Starukhin, Yu. (). Simulator of a laser rangefinder. TVOOB, no. 10, 1986, 34.

601. Privalov, V.Ye. (). Use of a He-Ne/I_(sub2) laser in metrology. IZTEA, no. 9, 1986, 20-23.

602. Sedukhin, A.G. (GOI). Analysis of the defects in the manufacture of circular scales by a scanning method. OPMPA, no. 10, 1986, 40-44.

603. Skoda, V. (). Properties of thin layers of TiO_(sub2) and Si_(sub2) and their application in laser optics. JMKOA, no. 4, 1986, 95-96. (RZFZA, 86/10L35).

604. Skoda, V.; Cuchy, Z. (). Thermal and optical properties of KDP, DKDP and LiNbO_(sub3) electrooptic single crystals. JMKOA, no. 4, 1986, 97. (RZRAB, 86/10Ye405).

605. Smirnov, V.I.; Fedyanova, Ye.L. (MEI). Effect of axial fluctuations in the directional pattern of a laser, on the parameters of optical laser anemometers. MEI. Nauchnyye trudy, no. 60, 1985, 90-96. (RZRAB, 86/9Ye679).

606. Solomakha, D.A.; Mikhaytlova, T.P.; Ivashechkina, M.A. (). Certification of a Fizeau interferometer of an operating standard unit of wavelength for pulsed lasers. IZTEA, no. 10, 1986, 17-18.

607. Stabnikov, M.V. (). What's new in the development of holographic track detectors. UFNAA, v. 148, no. 4, 1986, 719-725. (RZFZA, 86/9V4).

608. Tikhomirov, I.A.; Umnov, S.P.; Vyatkin, S.P.; Mamyrqaziyev, S.T. (ToPI). Kinetics of heating and vaporization of condensed particles in a plasma, allowing for the temperature dependence of its thermodynamic parameters [studied by laser and microwave diagnostics]. VINITI. Deposit, no. 4714-V, 30 Jun 1986, 21 p. (RZFZA, 86/10G207).

609. Tolkachev, A.V.; Chebunin, V.G. (MEI). Optimizing the parameters of a laser Doppler anemometer for measuring ultra-low velocities. MEI. Nauchnyye trudy, no. 60, 1985, 87-90. (RZRAB, 86/9Ye677).

610. Tomanek, P. (). Fiberoptic sensors. JMKOA, no. 3, 1986, 59-62. (RZFZA, 86/10L684).

611. Tsvetkov, A.D.; Sedov, B.M.; Potapova, N.I.; Shchavelev, O.S. (). Measurement of the difference in refractive indices of baked glasses. ZPSBA, vol. 45, no. 4, 1986, 652-656.

612. Turan, J.; Petrik, S. (). Fiberoptic sensors of magnetic fields and electric currents. ELKCA, no. 3, 1986, 224-231. (RZRAB, 86/9Ye470).

613. Tverdovskiy, V.I. (). Laser instrument for determining the vertical deformations of structures. GZKGA, no. 9, 1986, 11-15.

614. Ursu, I.; Vasiliu, V.; Bachmann, P. (). The ELAC-11 He-Ne laser device for guiding mine excavation. SCEFA, no. 3, 1986, 310-312. (RZRAB, 86/9Ye705).

615. Usoskin, A.I.; Klitsova, Zh.I. (). Measuring the absorption coefficient of light by optical exposure. MTRLB, no. 5, 1986, 18-26. (RZRAB, 86/9Ye635).

616. Vil'danov, R.R.; Mirzayev, A.T.; Yakubov, A.N. (). Interferometric image recording in the infrared. IVUZB, no. 5, 1986, 97-98. (RZRAB, 86/9Ye628).

617. Vitushkin, L.F.; Kazakov, A.Ya. (). Various types of noises in laser interferometric gravitational antennas. CRSSIDGV, Dubna, 25-27 Jun 1985. Trudy. Dubna, 1985, 55-60. (RZRAB, 86/9Ye740).

618. Vitushkin, L.F.; Smirnov, M.Z. (). Quantum model of a laser interferometric gravitational antenna. CRSSIDGV, Dubna, 25-27 Jun 1985. Trudy. Dubna, 1985, 65-73. (RZRAB, 86/9Ye739).

619. Vlasko-Vlasov, V.K.; Uspenskaya, L.S. (IFTT). Self-oscillating conditions of the generation of domain walls in ferromagnetics. ZETFA, vol. 91, no. 4, 1986, 1483-1495.

620. Vlokh, O.G.; Kityk, A.V.; Polovinko, I.I.; Sveleba, S.A. (LvGU). Thermal memory effect in an incommensurable phase of K₂ZnCl₄ crystals. UFIZA, no. 9, 1986, 1389-1391.

621. Voronov, S.A.; Zhizhin, G.N.; Uvarov, F.A.; Yakovlev, V.A. (ISAN). Interference measurements of the dispersion of surface polaritons in crystalline quartz. FTVTA, no. 10, 1986, 3206-3208.

622. Vyzhigin, Yu.V.; Komarovskiy, K.F.; Fedortsov, A.B.; Churkin, Yu.V. (SZPI). Experimental detection of absorption-interference interaction of light in a semiconductor. FTPPA, no. 9, 1986, 1747.

623. Wilfert, O.; Dusek, J. (). Experimental device for determining surface roughness by an optoelectronic method. ELKCA, no. 3, 1986, 196-201. (RZRAB, 86/9Ye672).

624. Yakimchuk, V.I.; Zaremba, V.G.; Soldatov, B.I. (OGU). Fluctuations in orientation and scattering of light by nematic liquid crystals. UFIZA, no. 9, 1986, 1360-1362.

625. Yermakov, S.A.; Ruvinskiy, K.D.; Salashin, S.G.; Freydmann, G.I. (IPF). Experimental investigation of capillary-gravity ripple generation by strongly non-linear waves on the surface of a deep fluid. IFAOA, no. 10, 1986, 1072-1081.

626. Yesipov, I.B.; Naugol'nykh, K.A.; Nosov, V.N.; Pashin, S.Yu. (AKIN). Measurement of the probability distribution of sea surface curvature radii. IFAOA, no. 10, 1986, 1115-1117.

627. Zemskov, K.I.; Kazaryan, M.A.; Petrash, G.G.; Skripnichenko, A.S. (FIAN). Laser beam formation during intracavity object processing. KVEKA, no. 10, 1986, 2096-2101.

628. Zhilin, V.G.; Zvyagin, K.V.; Ivochkin, Yu.P. (IVTAN). Dynamic characteristics and spatial resolution of fiberoptic transducers for liquid metal velocity. TVYTA, no. 5, 1986, 967-973.

629. Zhupanov, V.G.; Zavidey, V.I.; Konotopov, A.N.; Kuznetsov, V.V.; Pustogarov, A.V.; Povalyayev, O.A. (). Unit for the determination of the emittance of the surface of a hot cathode. PRTEA, no. 5, 1986, 144-146.

630. Zubarevich, S.E.; Lebed'ko, Ye.G.; Stoyev, N.A. (LITMO). Method for stabilizing the level of the signal received in optoelectronic range finders. IVUBA, no. 9, 1986, 79-83.

631. Zuyev, A.P.; Tkachenko, B.K. (MFTI). Measurement of the V-T- and V-V- relaxation time by a laser schlieren method behind an incident shock wave. Mixture of CO₂ with N₂ and O₂. KHFID, no. 10, 1986, 1307-1315.

2. Laser-Excited Optical Effects

632. Abdullayev, G.B.; Aliyev, Ye.T.; Belen'kiy, G.L.; Godzhayev, M.O. (IFANAz). Time evolution of the density of an electron-hole liquid in stratified indium selenide. FTVTA, no. 9, 1986, 2900-2902.

633. Agranovich, V.M. (ISAN). Linear Stark effect in centrosymmetric molecules in vitreous matrices. FTVTA, no. 9, 1986, 2757-2764.

634. Andronov, A.A. (IPF). Cyclotron resonance masers in semiconductors. IVYRA, no. 9, 1986, 1017-1031.

635. Apatin, V.M.; Makarov, G.N. (ISAN). Specificity of nonlinear absorption of infrared radiation by [CF₃]₃CB₃ molecules at vibrational excitation levels exceeding the dissociation energy. ZETFA, vol. 91, no. 4, 1986, 1219-1232.

636. Ashkalunin, A.L.; Valov, P.M.; Leyman, V.I. (LTITsBP). High-temperature luminescence in silver chloride at high levels of photoexcitation. FTVTA, no. 9, 1986, 2906-2908.

637. Atutov, S.N.; Yermolayev, I.M.; Shalagin, A.M. (IAESOAN). Photoinduced current in sodium vapor. ZETFA, v. 90, no. 6, 1986, 1963-1971.

638. Atutov, S.N.; Lesyak, S.; Pod'yachev, S.P.; Shalagin, A.M. (IAESOAN). Photoinduced drift in a cluster of sodium vapor. IAESOAN. Preprint, no. 321, 1986, 10 p. (RZFZA, 86/10L1093).

639. Auzin'sh, M.P.; Tamanis, M.Ya.; Ferber, R.S. (LatGU). Zeeman quantum beats in a transient process following the optical depopulation of the ground electron state of diatomic molecules. ZETFA, v. 90, no. 4, 1986, 1182-1190.

640. Belov, A.L.; Kraynov, V.P. (). Mathematical modeling of the excitation of atoms by short laser pulses during optical collisions. Metody vychislitel'noy fiziki i ikh prilozheniya. MIFI. Moskva, Energoatomizdat, 1986, 12-17. (RZFZA, 86/10L79).

641. Bergner, H.; Brueckner, V.; Kerstan, F.; Leine, L.; Schulze, M.; Nowick, W. (). Thermally and carrier induced changes in the photoconductivity in alpha-Si in the subnanosecond time domain (in English). PSSAB, v. A94, no. 2, 1986, K137-K141. (RZFZA, 86/10N729).

642. Boyko, S.A.; Valakh, M.Ya.; Dykman, M.I.; Lisitsa, M.P.; Tarasov, G.G.; Shpak, A.M. (IPANUK). Self-induced oscillations of radiation polarization in crystals of KCl with F_{subA}(Li)-centers. FTVTA, no. 9, 1986, 2769-2773.

643. Bryksin, V.V.; Korovin, L.I.; Kuz'min, Yu.I. (FTI). Evolution of a photoinduced charge under arbitrary absorption of light, allowing for capture by traps. FTVTA, no. 9, 1986, 2728-2736.

644. Bugayev, A.A.; Zakharchenya, B.P.; Kiselev, Yu.B.; Lukoshkin, V.A. (FTI). Effect of a speckle-structure of a pumping field of a picosecond pulse on the amount of induced absorption in silicon. PZTFD, no. 18, 1986, 1125-1129.

645. Bune, A.V.; Pashkov, V.A. (). Drift mobility of electrons in lithium niobate crystals. FTVTA, no. 10, 1986, 3024-3027.

646. Buyanova, I.A.; Ostapenko, S.S. (IPANUK). Polarized photo- and thermoluminescence of anisotropic centers in GaP single crystals. UFIZA, no. 10, 1986, 1469-1476.

647. Delyukov, A.A.; Klimusheva, G.V.; Turchin, A.V. (IFANUk). Self-suppression of exciton-exciton annihilation in a dense system of molecular excitons. ZFPRA, vol. 44, no. 5, 1986, 255-257.

648. Ebralidze, T.D.; Mumladze, A.N. (IKGr). Phase difference between conventional and unconventional waves in media with photoinduced anisotropy. GruzNIINTI. Deposit, no. 221-G, 16 Jun 1986, 14 p. (RZFZA, 86/10L133).

649. Ganichev, S.D.; Yemel'yanov, S.A.; Ivchenko, Ye.L.; Perlin, Ye.Yu.; Terent'yev, Ya.V.; Fedorov, A.V.; Yaroshetskiy, I.D. (). Multiphoton absorption in semiconductors in the submillimeter range. ZETFA, vol. 91, no. 4, 1986, 1233-1248.

650. Gavrilov, M.Z.; Sviridova, R.N.; Yermolenko, I.N. (IONKhANB). Thermal bleaching of catalytically dehydrated polyvinyl alcohol. DBLRA, no. 9, 1986, 829-831.

651. Georgobiani, A.N.; Kotlyarevskiy, M.B.; Pegov, A.A.; Chernyavskiy, B.G. (ToGPI). Model of intrinsic defect centers for edge radiation in zinc selenide. IVUFA, no. 10, 1986, 105-107.

652. Golovinskiy, P.A. (VISI). Methods for calculating correlation interaction in a strong electromagnetic field. VINITI. Deposit, no. 3991-V, 3 Jun 1986, 96 p. (RZFZA, 86/10D267).

653. Ivanov, S.V.; Panchenko, V.Ya.; Chugunov, A.V. (). Action of strong IR laser fields on triatomic molecules. IANFA, no. 4, 1986, 695-701. (RZRAB, 86/9Ye722).

654. Kashkarov, P.K.; Petrov, A.V. (MGU). Charge transfer processes in Ge-GeO₂ structures under the action of nano- and picosecond light pulses. VMUFA, no. 5, 1986, 57-60.

655. Kopytov, G.F.; Tlyachev, V.B.; Oksuzyan, S.S. (). Radiation from electrons in a non-monochromatic Redmond field. IVUFA, no. 2, 1986, 110-111. (RZFZA, 86/9L886).

656. Korshunov, G.S.; Ustyuzhin, V.V. (). Study on the operation time of a laser-triggered gas spark gap dependent on the amount of pressure. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Vol. 2. Tomsk, 1986, 255-257. (RZRAB, 86/9Ye667).

657. Kostyshin, M.T.; Kasyarum, O.P.; Kolomiyets, V.V. (IPANUK). Specific light sensitivity of semiconductor-metal systems. UFIZA, no. 10, 1986, 1555-1558.

658. Kosulin, N.L.; Smirnov, V.S.; Tumaykin, A.M. (). Rotation of the ellipse of polarization under quasilinear interaction between light and the ground state of atoms at the 1/2 to 1/2 transition under optical self-pumping in a magnetic field. OPSPA, v. 60, no. 4, 1986, 864-866.

659. Kotlikov, Ye.N.; Khryashchev, L.Yu. (). Experiment on the formation of the angular distribution of a photodeflected atomic beam. OPSPA, vol. 61, no. 3, 1986, 646-648.

660. Kovalev, A.A.; Nekrasov, G.L.; Serak, S.V. (). Thermooptic phase modulation of light in nematic liquid crystals under single-pulsed laser excitation. VBSFA, no. 2, 1986, 40-46. (RZFZA, 86/9I193).

661. Kovalev, A.A.; Nekrasov, G.L.; Serak, S.V. (). Effect of order parameter variation on bleaching of dichroic dyes in a liquid-crystal matrix. ZPSBA, vol. 45, no. 4, 1986, 578-583.

662. Kumpyak, Ye.V.; Lomayev, M.I.; Mel'chenko, S.V.; Potalitsyn, Yu.F.; Tarasenko, V.F.; Toptygin, V.V. (). Laser-triggered megavolt gas commutator. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Vol. 2. Tomsk, 1986, 148-150. (RZRAB, 86/9Ye588).

663. Kumpyak, Ye.V.; Lomayev, M.I.; Panchenko, A.N.; Potalitsyn, Yu.F.; Tarasenko, V.F. (). Triggering of a spark gap by UV laser radiation delivered by a lightguide. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Vol. 2. Tomsk, 1986, 151-153. (RZRAB, 86/9Ye587).

664. Lisitsa, M.P.; Motsnny, F.V.; Yaremko, A.M. (IPANUK). Effect of the intensity of excitation on the photoluminescence of bound excitons in stratified 2H-PbI₂ single crystals. FTVTA, no. 10, 1986, 3175-3177.

665. Lisovenko, V.A.; Piryatinskiy, Yu.P.; Shpak, M.T. (IFANUK). Intensity of dislocation luminescence in anthracene crystals as a function of excitation intensity and temperature. UFIZA, no. 10, 1986, 1476-1480.

666. Onishchenko, A.M.; Pashkov, V.A.; Topchiy, S.B. (). Mechanism of the photorefractive effect in undoped LiNbO₃ crystals. FTVTA, no. 10, 1986, 3168-3170.

667. Petrov, Yu.N. (). Selective heterogeneous processes in a resonant laser radiation field. Absorption and diffusion of molecules. IANFA, no. 4, 1986, 677-682. (RZFZA, 86/9L1096).

668. Pirogov, F.V.; Gerbreder, V.I.; Shvarts, K.K.; Teteris, Ya.A. (IFANLA). Photoinduced changes of optical density of amorphous Sb_{0.2}Se_{0.8} films. FTVTA, no. 9, 1986, 2845-2848.

669. Razbirin, B.S.; Starukhin, A.N.; Khel'big, R. (FTI). Activation of centers of the radiative recombination of excitons in zinc oxide crystals during laser excitation. FTVTA, no. 9, 1986, 2808-2812.

670. Shilova, M.V.; Kolosov, Ye.Ye.; Fedoseyeva, N.V.; Leonov, Ye.I. (GGU; GIFTI). Kinetics of photoconductivity in Bi₁₂SiO₂₀ single crystals. IVNMA, no. 10, 1986, 1748-1750.

671. Teteris, Ya.A.; Reynfelde, M.Ya. (). Gram-atom volume and photoinduced change in the optical properties of As-Se samples. IVNMA, no. 4, 1986, 584-586. (RZFZA, 86/10L40).

672. Troyan, Yu.G.; Sizov, F.F.; Lakeyenkov, V.M. (IPANUK). Photoelectric properties of high-resistance PbTe(Ga) single crystals. FTPPA, no. 10, 1986, 1776-1781.

673. Ustyuzhin, V.V.; Shcherbakov, V.V. (). Time characteristics of a laser-triggered gas-filled spark gap. CVSSElek, 6th, 27-29 May 1986. Tezisy dokladov. Vol. 2. Tomsk, 1986, 273-274. (RZRAB, 86/9Ye666).

674. Vavilov, V.S.; Senokosov, E.A.; Chukichev, M.V. (KIGU). Retuning of edge cathode luminescence spectra in strongly excited epitaxial films of zinc selenide. FTVTA, no. 9, 1986, 2614-2620.

675. Zalesskaya, G.A.; Pavlova, V.T. (). Intercombination conversion T₁ to S₀ at high levels of oscillatory excitation of triplet molecules. ZPSBA, vol. 45, no. 3, 1986, 501-505.

676. Zdebskiy, A.P.; Sheynkman, M.K.; Annaniyazov, A.N.; Garyagdyyev, G. (IPANUk). Photoinduced change in the speed of sound in centrosymmetric crystals in an exterior electric field. PZTFD, no. 18, 1986, 1134-1137.

677. Zhilyayev, Yu.V.; Markaryan, G.R.; Rossin, V.V.; Rossina, T.V.; Travnikov, V.V. (FTI). Polariton luminescence in GaAs. FTVTA, no. 9, 1986, 2688-2695.

678. Ziep, O.; Mironov, A.G.; Keiper, R. (). Nonlinear high-electric-field transport in the presence of strong laser radiation (in English). PSSBB, v. B133, no. 1, 1986, 409-416. (RZFZA, 86/9N493).

3. Laser Spectroscopy

679. Abroskin, A.G.; Nol'de, S.Ye.; Fedorov, V.V.; Chekalyuk, A.M. (GEOKhI). Package of software and library of programs for laser spectroscopy of liquid media. VINITI. Deposit, no. 4778-V, 1 Jul 1986, 14 p. (RZFZA, 86/10L579).

680. Abutalybov, G.I.; Neymanzade, I.K.; Razbirin, B.S.; Salayev, E.Yu.; Starukhin, A.N. (IFANAZ). Luminescence and the edge-absorption spectrum of a TlGaSe₂ crystal. FTPPA, no. 9, 1986, 1699-1701.

681. Agel'menev, M.Ye.; Georgobiani, A.N.; Ilyukhina, Z.P.; Kleybanov, M.S.; Levit, A.D.; Lepnev, L.S. (FIAN). Interrelationship of exciton and long-wavelength (maximum about 500 nm) luminescence of zinc selenide containing alkaline metals. KRSFA, no. 9, 1986, 37-39.

682. Akhmanov, A.S.; Baranov, V.Yu.; Baryshnikov, A.A.; Kholudev, I.S.; Pis'menny, V.D.; Polyakov, G.A. (). Infrared fluorescence study on intramolecular dynamics of strong vibrationally excited polyatomic molecules. IANFA, no. 4, 1986, 702-708. (RZFZA, 86/9L1133).

683. Akhmanov, S.A.; Zheludev, N.I.; Zadoyan, R.S. (MGU). Picosecond spectroscopy of nonlinear optical activity and nonlinear absorption in gallium arsenide. ZETFA, vol. 91, no. 3, 1986, 984-1000.

684. Aleshchenko, Yu.A.; Vodop'yanov, L.K. (FIAN). Raman scattering of light in a system of solid solutions of Cd(1-x)Hg(x)Te at resonance in the E₀+Δ₀ gap. FTVTA, no. 9, 1986, 2891-2893.

685. Aleshchenko, Yu.A.; Vodop'yanov, L.K. (FIAN). Raman scattering of light in Cd_{0.2}Hg_{0.8}Te near resonance at the E₁ energy gap. KRSFA, no. 8, 1986, 34-36.

686. Al'shits, Ye.I.; Kharlamov, B.M.; Personov, R.I. (). Petroleum chemical laser burning of dips. ZPSBA, vol. 45, no. 4, 1986, 559-562.

687. Amanyanyan, S.N.; Antonov, V.A.; Arsen'yev, P.A.; Bagdasarov, Kh.S.; Kholodnyy, D.S. (MEI; IKAN). Spectral properties of Er³⁺ ions in lanthanum and yttrium oxysulfide crystals. KRISA, no. 5, 1986, 960-963.

688. Antonov, V.A.; Arsen'yev, P.A.; Bagdasarov, Kh.S.; Kopylova, Ye.K.; Tadzhi-Aglayev, Kh.G. (MEI). Structure of luminescence centers in Ba₃LaM₃O₁₂:Eu³⁺ (M=Ta, Nb) crystals. KRISA, no. 5, 1986, 964-967.

689. Antonov, V.A.; Arsen'yev, P.A.; Bagdasarov, Kh.S.; Yevdokimov, A.A.; Kopylova, Ye.K.; Tadzhi-Aglayev, Kh.G. (). Spectral-luminescent properties of crystals of rhombohedral perovskite Ba₃LaTa₃O₁₂+Nb³⁺. ZPSBA, vol. 45, no. 3, 1986, 424-428.

690. Asanov, B.U.; Ochkin, V.N.; Savinov, S.Yu.; Sobolev, N.N.; Tskhay, S.N. (FIAN). Distribution of H₂[X¹Sigma] molecules over their rotational states in a gas discharge plasma. KRSFA, no. 9, 1986, 26-27.

691. Asimov, M.M.; Lopatko, V.N.; Rubinov, A.N. (IFANB). Improvement in the sensitivity of the intracavity laser spectroscopy method with the use of a nonlinear absorber. KVEKA, no. 10, 1986, 2067-2070.

692. Aslanov, G.K.; Briskina, Ch.M.; Zolin, V.F.; Markushev, V.M.; Niftiyev, G.M.; Tagiyev, O.B. (IRE). Spectral luminescence research on binary gallium chalcogenides and rare earth elements with neodymium. IVNMA, no. 10, 1986, 1630-1634.

693. Atakhodzhayev, A.A.; Fedoseyev, V.N. (). Laser photoionization spectroscopy of autoionization states of a thulium atom. ZPSBA, vol. 45, no. 3, 1986, 386-391.

694. Azhnyuk, Yu.N.; Artamonov, V.V.; Valakh, M.Ya.; Lisitsa, M.P. (IPANUK). Scattering of light by electron transitions of nitrogen donors in 21R-SiC crystals. FTPPA, no. 5, 1986, 922-925.

695. Bachilo, S.M.; Bondarev, S.L. (). Spectral-polarization properties of two-photon absorption of retinene and retinal acetate. ZPSBA, vol. 45, no. 4, 1986, 623-629.

696. Badalyan, A.M.; Glushko, B.A.; Dabagyan, A.A.; Movsesyan, M.Ye. (). Broadening of spectral lines of sodium atoms by collisions with atoms of a buffered gas. ZPSBA, vol. 45, no. 3, 1986, 369-373.

697. Balbakov, Dzh. (SFTI). Optical absorption spectra in alkali-halide + Me³⁺ crystals. IVUFA, no. 9, 1986, 107-109.

698. Baranov, A.V.; Bobovich, Ya.S.; Vasilenko, N.P. (). Realization of double resonances in inelastic three-photon light scattering by polymethine-dye molecules. OPSPA, vol. 61, no. 4, 1986, 780-785.

699. Bayev, V.M.; Gamaliy, V.F.; Sviridenkov, E.A.; Toptygin, D.D. (FIAN). Intracavity laser spectroscopy study on resonance effects in two-photon absorption. KRSFA, no. 8, 1986, 3-5.

700. Bayev, V.M.; Gamaliy, V.F.; Sviridenkov, E.A.; Toptygin, D.D. (FIAN). Effect of time modulation of gain on the lasing spectrum of a wideband laser with intracavity absorption. KRSFA, no. 8, 1986, 6-8.

701. Berik, I.K.; Berik, Ye.B.; Svetashev, A.G.; Tsvirko, M.P. (). Absorption from the (sup2)D(5d) excited state of Ce³⁺ in solution. OPSPA, vol. 61, no. 4, 1986, 710-712.

702. Berkov, D.V.; Manykin, E.A.; Sakipov, N.Z. (IFTT). Investigation of small ferromagnetic particles by a correlation spectroscopy method. ZFPRA, vol. 44, no. 5, 1986, 229-232.

703. Beterov, I.M. (). Stimulated Raman ionization spectroscopy. IANFA, no. 4, 1986, pp. not given. (RZFZA, 86/9L1138).

704. Bobrovnikova, I.A.; Lavrent'yeva, L.G.; Toropov, S.Ye. (SFTI). Trapping of impurity complexes during gas-phase epitaxy of gallium arsenide. FTPPA, no. 9, 1986, 1701-1703.

705. Bogdanov, Yu.V.; Kanorskiy, S.I.; Sobel'man, I.I.; Sorokin, V.N.; Struk, I.I.; Yukov, Ye.A. (). Collisional broadening of superfine-structure components for the bismuth 648 nm line by Faraday spectroscopy. OPSPA, vol. 61, no. 3, 1986, 446-456.

706. Borisov, S.K.; Korochigova, S.A.; Karpov, N.A.; Mishin, V.A.; Stel'makh, O.M. (). Laser spectroscopy of self-ionization resonances in atomic ytterbium. OPSPA, vol. 61, no. 4, 1986, 716-718.

707. Brodin, M.S.; Kadan, V.N.; Matsko, M.G.; Rybak, V.M. (IFANUk). Hyper-Raman and multiphoton scattering through biexciton states in PbI₂ and HgI₂ crystals. FTVTA, no. 10, 1986, 3112-3117.

708. Burakov, V.S.; Gvozdev, A.A.; Misakov, P.Ya.; Naumenkov, P.A.; Peliyeva, L.A. (). Investigation of the gas phase of a graphite tubular furnace by an intracavity laser spectroscopy method. ZPSBA, vol. 45, no. 3, 1986, 373-377.

709. Burkutbayev, S.M.; Buyanov, V.M.; Kiyachenko, Yu.F.; Manykin, E.A.; Sakipov, N.Z. (MIFI). Laser cross-correlation spectrometer based on an X6-4 meter of correlation characteristics. PRTEA, no. 5, 1986, 165-167.

710. Burov, L.I.; Gancherenok, I.I. (). Normal waves in media with photoinduced anisotropy [studied by nonlinear polarization spectroscopy]. OPSPA, v. 60, no. 3, 1986, 567-572.

711. Bushuk, B.A.; Murav'yev, A.A.; Rubinov, A.N. (IFANB). Change in the time of fluorescence spectra of oxazine-17 in proton donor and aprotic solvents under excitation by ultrashort light pulses. KHFID, no. 5, 1986, 628-631.

712. Bykovskiy, Yu.A.; Timoshin, V.T.; Laptev, I.D.; Manykin, E.A. (MIFI). Correlation between the binding energy of neutrons in nuclei and the anomalous fractionation of isotopes in biomedical specimens. IVUFA, no. 10, 1986, 62-66.

713. Dem'yanenko, A.V.; Zasavitskiy, I.I.; Ochkin, V.N.; Salinov, S.Yu.; Sobolev, N.N.; Spiridonov, M.V.; Shotov, A.P. (FIAN). Pulsed diode laser spectroscopy study on the distribution of CO₂ molecules by vibrational-rotational levels in a glow discharge. FIAN. Preprint, no. 167, 1986, 21 p. (RZFZA, 86/9L331).

714. Dittse, Kh.I.; Bekker, S.; Vetsel', K.; Rodin, A.M.; Bogdanov, D.D.; Ter-Akop'yan, G.M. (OIYaI). Mass-spectrometric analysis of traces in solids by means of the LTI501 high-quality laser. OIYaI. Soobshcheniye, no. R13-86-199, 1986, 11 p. (RZFZA, 86/10V359).

715. Gayko, O.L.; Orlov, L.N.; Nekrashevich, Ya.I. (IFANB). Parameters of absorption lines of alcohol molecules at the lasing frequencies of a CO₂ laser. IFANB. Preprint, no. 417, 1986, 26 p. (RZFZA, 86/9L220).

716. Georgobiani, A.N.; Metlinskiy, P.N.; Radautsan, S.I.; Tiginyanu, I.M.; Ursaki, V.V. (). Optical properties of HgGa₂Se₄ near the fundamental absorption edge. FTVTA, no. 4, 1986, 1179-1180. (RZFZA, 86/9L369).

717. Georgobiani, A.N.; Metlinskiy, P.N.; Radautsan, S.I.; Tiginyanu, I.M.; Ursaki, V.V. (FIAN). Effect of annealing and implantation of selenium ions on the photoconductivity and luminescence spectra of HgGa₂Se₄. FTPPA, no. 6, 1986, 1116-1118.

718. Gladkov, L.L.; Starukhin, A.S.; Shul'ga, A.M. (). Fine-structure spectra of the fluorescence of metal chlorins. ZPSBA, vol. 45, no. 3, 1986, 410-414.

719. Gladkov, L.L.; Starukhin, A.S.; Shul'ga, A.M. (). Fine-structure fluorescence of Zn-octaethylchlorin and of its deuterated derivatives. ZPSBA, vol. 45, no. 4, 1986, 608-612.

720. Glinchuk, K.D.; Guroshev, V.I.; Prokhorovich, A.V. (IPANUK). Effect of fast-electron irradiation on the luminescence of p-type GaAs(Si) heavily doped and compensated epitaxial layers. FTPPA, no. 10, 1986, 1874-1877.

721. Glinchuk, K.D.; Guroshev, V.I.; Pokhorovich, A.V. (). Photoluminescence in chromium-doped semi-insulating GaAs after irradiation by 2.2 MeV electrons and annealing (in English). PSSAB, v. A94, no. 1, 1986, 203-206. (RZFZA, 86/10Yell09).

722. Golikova, Ye.V.; Mironov, A.V.; Privalov, V.Ye. (). Iodine-127 633 nm-wavelength absorption spectrum and its effect on the reproducibility of a He-Ne/I₂ laser frequency. OPSPA, vol. 61, no. 3, 1986, 444-445.

723. Gorokhovskiy, A.; Korrovits, V.; Pal'm, V.; Trummal, M. (). Temperature broadening of a photochemical dip in the spectrum of H₂-octaethylporphine in polystyrole at 0.05-1.5 K. ETFMB, no. 2, 1986, 150-156. (RZFZA, 86/10L1149).

724. Gorshkov, V.N.; Komarovskiy, V.A. (). Lifetimes of VI and VII excited levels. OPSPA, v. 60, no. 4, 1986, 876-878.

725. Izmaylov, A.Ch. (). Possibility of measuring small shifts in resonance frequencies. DAZRA, no. 7, 1985, 21-23. (RZFZA, 86/9L1130).

726. Katsnel'son, L.B.; Sokolova, Ye.A. (GOI). Determination of the equipment function of an infrared monochromator with a concave diffraction grating. OPMPA, no. 4, 1986, 46-49.

727. Kazak, N.S.; Lugina, A.S.; Miklavskaya, Ye.M.; Nadenenko, A.V.; Pavlenko, V.K.; Sinnikov, Yu.A. (). Using processes of nonlinear frequency conversion in intracavity laser spectroscopy. Kovariantnye metody v teoreticheskoy fizike. Optika i akustika. IFANB. Minsk, 1986, 174-179. (RZFZA, 86/10L1144).

728. Khar'ya, Ya.A.; Ferber, R.S.; Shmit, O.A. (). Dependence of electron-transition strength on the internuclear distance for A-X and B-X transitions of a ¹³⁰Te₂ molecule. OPSPA, vol. 61, no. 3, 1986, 470-473.

729. Kimtis, L.L.; Misyunas, G.A.; Shablinskas, V.I.; Alekса, V.I. (VilGU). Automated Raman spectrometer. PRTEA, no. 5, 1986, 243-244.

730. Kolobrodov, V.G.; Sakhno, S.P.; Tymchik, G.S. (GOI). Pulsed response and energy calculations of optical systems of coherent spectroanalyzers. OPMPA, no. 4, 1986, 12-14.

731. Konstantinov, A.V.; Maksimov, L.V.; Togatov, D.V. (GOI). Automated spectrometer for the investigation of the fine structure of scattered light. OPMPA, no. 9, 1986, 21-22.

732. Kotlikov, Ye.N.; Perchuk, O.V. (). Determination of neon 2p₄-level broadening by depolarizing collisions with inert gases. OPSPA, vol. 61, no. 4, 1986, 892-895.

733. Kravchenko, V.I.; Terenetskaya, I.P. (). High-speed non-gap laser spectrometry. *Fizika molekulyarnykh kristallov*. IFANUK. Kiyev, 1986, 183-192. (RZFZA, 86/10L1165).

734. Kuchinskiy, A.A.; Lyublin, B.V.; Sheverev, V.A. (). Spectroscopic investigation of a self-sustained discharge in molecular gases. *ZPSBA*, vol. 45, no. 3, 1986, 364-369.

735. Kulya, S.V.; Spiro, A.G.; Tsiopa, Ye.A. (). Structural rearrangements in rhodamine molecules *OPSPA*, vol. 61, no. 4, 1986, 903-904.

736. Latush, L.T.; Rabkin, L.M.; Torgashev, V.I.; Yuzyuk, Yu.I.; Shuvalov, L.A.; Shchagina, N.M. (RGU; IKAN). Raman spectra of $NaK(1-x)[NH_{sub 4}]_x C_{sub 4}H_{sub 4}O_{sub 6} \cdot 4H_{sub 2}O$ systems. *KRISA*, no. 5, 1986, 956-959.

737. Lorenz, U.; Harmgarth, K. (). Method for spectrum analytical determination of the thickness of thin layers. Patent GDR, no. 231126, 14 Dec 1985. (RZRAB, 86/9Ye623).

738. Lukomskiy, N.G.; Polishchuk, V.A. (). Frequency locking of a tunable laser to atomic lines with the aid of a Faraday cell. *ZPSBA*, vol. 45, no. 3, 1986, 382-386.

739. Lyalin, G.N.; Mikhalevkin, A.B.; Moiseyenko, Ye.V. (NIIIFL). Spectroscopy of xanthone, adsorbed on metal oxides. *KHFID*, no. 9, 1986, 1177-1183.

740. Lyubimtsev, V.A.; Yermolayev, V.L. (). Spectra and quantum yields of fluorescence from upper excited singlet states of aromatic molecules in solutions. Relaxation cascading. *OPSPA*, vol. 61, no. 3, 1986, 511-517.

741. Maleyev, D.I.; Martynov, V.P.; Urakov, V.V.; Petrov, I.N. (FTIUNTs). Optical multichannel analyzer-spectrophotometer. *PRTEA*, no. 3, 1986, 242.

742. Matveyets, Yu.A.; Chekalin, S.V.; Yartsev, A.P. (ISAN). Femtosecond energy transfer in the physical stages of photosynthesis. *ZFPRA*, v. 43. no. 11, 1986, 546-548.

743. Minogin, V.G.; Novikov, V.D. (ISAN). Visiting session of the Scientific Council on Coherent and Nonlinear Optics, Academy of Sciences USSR (NSKNO), held at the Institute of Spectroscopy, Academy of Sciences USSR (ISAN), Troitsk, Moscow oblast', 23 April 1986. KVEKA, no. 10, 1986, 2155-2157.

744. Prilipko, V.K.; Aleksandrov, Ye.B. (). Optical pumping of sublevels of the ground state of thulium. OPSPA, v. 60, no. 3, 1986, 670-671.

745. Proskura, A.I.; Zakharchenko, I.V. (). Edge radiation spectra of A²⁺B⁶⁺ luminescent ceramics. ZPSBA, vol. 45, no. 3, 1986, 434-438.

746. Rebane, L.A. (). Resonance Raman scattering by impurity molecules in crystals. Fizika molekulyarnykh kristallov. IFANUk. Kiyev, Naukova dumka, 1986, 137-155. (RZFZA, 86/10L396).

747. Shablayev, S.I.; Subashiyev, V.K. (FTI). Alteration of the band structure in the cubic to tetragonal phase transition in monodomain SrTiO₃ deduced from data of two-photon absorption spectra. ZETFA, vol. 91, no. 4, 1986, 1436-1443.

748. Shakhverdov, T.A.; Kalinin, V.N.; Ergashev, R. (). Intracomplex processes of energy deactivation for a triplet state of pyrentetrasulphonate, bound with rare-earth ions. OPSPA, vol. 61, no. 3, 1986, 518-520.

749. Smol'skaya, L.P.; Lobanov, B.D.; Maksimova, N.T.; Grigorov, V.A. (). Tl⁰V⁺ color centers in KCl-Tl crystals. OPSPA, vol. 61, no. 4, 1986, 882-885.

750. Stel'makh, G.F.; Tsvirko, M.P. (NIIPFP). Spectral display of intermolecular interaction during triplet-triplet annihilation in a solution of metalloporphyrins. KHFID, no. 10, 1986, 1322-1328.

751. Stuchebryukhov, A.A.; Khromov, I.Ye. (FIAN). IR absorption spectrum of high vibrationally excited polyatomic molecules. KRSFA, no. 7, 1986, 22-25.

752. Studenyak, I.P.; D'orday, V.S.; Stefanovich, V.A.; Kovach, D.Sh.; Borets, A.N.; Slivka, V.Yu. (UZhGU). Vibrational spectra of Cu₆PS₅Hal super-ion compounds. UkrNIINTI. Deposit, no. 862-Uk, 26 Mar 1986, 35 p. (RZFZA, 86/9L358).

753. Terpilovskiy, A.I.; Karsparov, K.N. (). Photoemission method of the identification of narrow-band spectra in fast-flow processes. OPSPA, vol. 61, no. 3, 1986, 615-617.

754. Torgashev, V.I.; Yuzyuk, Yu.I.; Smutnyy, F.; Polomska, M. (RGU). Raman spectra of lithium-ammonia sulfate. KRISA, no. 5, 1986, 951-955.

755. Ufimtseva, R.N.; Shtern, E.K.; Tauson, V.A.; Kononova, I.N. (). Standard samples for the quantitative laser microanalysis of sulfide minerals. ZPSBA, vol. 45, no. 3, 1986, 377-382.

756. Vasil'yeva, G.S.; Kosov, A.V.; Sizykh, A.G.; Sorokin, A.V. (). Vibrational spectra and the structure of crystals of the sillenite family. ZPSBA, vol. 45, no. 4, 1986, 683-685.

757. Verolaynen, Ya.F. (). Estimating radiation lifetimes of Rydberg states of atoms and ions. OPSPA, vol. 61, no. 4, 1986, 900-903.

758. Viktorova, A.A.; Savikin, A.P.; Trofimov, M.G. (GGU). Improving the resolution of an intracavity laser spectrometer. VINITI. Deposit, no. 5243-V, 17 Jul 1986, 36-38. (RZFZA, 86/10L573).

759. Vodchits, A.I.; Iodo, N.M.; Sharamko, L.S. (). Laser anti-Stokes Raman spectrometer for studying gases. CVKAVTFG, Mar 1985. Materialy. Novosibirsk, 1985, 276-181. (RZFZA, 866/0L1161).

760. Vorob'yev, V.G. (GOI). Alignment control of optical schemes of spectral equipment. OPMPA, no. 4, 1986, 59-60.

761. Voropay, Ye.S.; Gruzinskiy, V.V.; Torpachev, P.A. (IFANB). Intracavity laser spectroscopy in the nanosecond range. IFANB. Preprint, no. 406, 1986, 42 p. (RZFZA, 86/9L1128).

762. Voytovich, A.P.; Mashko, V.V. (). Studying magnetooptic phenomena by intracavity spectroscopy. IANFA, no. 4, 1986, 745-750. (RZFZA, 86/9L1129).

763. Voytovich, A.P.; Runets, L.P.; Smirnov, A.Ya.; Teplyashin, L.L. (IFANB). Dual-wave laser [for absorption spectrum analysis]. OTIZD, no. 12, 1986, 1087025. (RZRAB, 86/10Ye470).

764. Weszka, J.; Renucci, M.; Zwick, A. (). Raman scattering in Cd₃As₂ single crystals (in English). PSSBB, v. B133, no. 1, 1986, 57-64. (RZFZA, 86/10L398).

765. Zharov, V.P.; Amer, N.M. (). Laser calorimetric spectroscopy in flows. IANFA, no. 4, 1986, 820-827. (RZRAB, 86/9Ye708).

J. BEAM-TARGET INTERACTION

1. Miscellaneous Targets

766. Bugayev, A.A.; Zakharchenya, B.P.; Ivanov, M.G.; Merkulov, I.A. (FTI). Cellular structures of surface relief of silicon under melting by picosecond pulses. PZTFD, no. 4, 1986, 220-224.

767. Buishvili, L.L.; Topchyan, I.I. (IFANG). Effect of gap vibrations on thermal relaxation processes in laser-irradiated alkali-halide crystals. FTVTA, no. 10, 1986, 3000-3005.

768. Butenin, A.V.; Kogan, B.Ya. (NIOPIK). Mechanism of laser damage of polymeric materials. KVEKA, no. 10, 1986, 2149-2151.

769. Christianssen, W.; Sowoidnich, K.; Schiemann, D. (). Method for precision trimming of homogeneous surface attenuators with an attenuation coefficient of less than 3 decibels. Patent GDR, no. 229807, 13 Nov 1985. (RZRAB, 86/10Ye454).

770. Christianssen, W.; Sowoidnich, K.; Schiemann, D. (). Method for precision trimming of homogeneous surface attenuators with a high attenuation coefficient. Patent GDR, no. 229808, 13 Nov 1985. (RZRAB, 86/10Ye453).

771. Galiyev, Sh.U.; Zhurakhovskiy, S.V.; Titarenko, S.I. (IPP). Mathematical models of the action of thermooptic pulses on materials. IPP. Preprint, no. not given, 1986, 47 p. (RZFZA, 86/9Ye1065).

772. Gektin, A.V.; Perepechay, M.P.; Shiran, N.V. (VNIIMono). Threshold of optical breakdown of gamma-irradiated KCl crystals at the wavelength of CO₂ laser radiation. VNIIMono. Sbornik nauchnykh trudov, no. 15, 1986, 18-21. (RZFZA, 86/10L1111).

773. Hacke, E.; Bernitzki, H.; Dohle, R.; Meyer, J.; Lauth, H.; Wolf, R. (). Laser-resistant absorption-free oxide-film optical components. Patent GDR, no. 230651, 4 Dec 1985. (RZRAB, 86/9Ye568).

774. Isayev, A.A.; Zemskov, K.I.; Kazaryan, M.A.; Petrash, G.G. (FIAN). Device for processing of objects by laser radiation. OTIZD, no. 12, 1986, 638207. (RZRAB, 86/10Ye451).

775. Korshak, V.V.; Nikitin, L.N.; Said-Galiyev, E.Ye.; Merinov, I.G. (INEOS; MIFI). Generating a dynamic thermal field in the surface layers of polyphenylenoxide products by means of infrared laser radiation. MKMAD, no. 5, 1986, 791-794.

776. Kravets, A.N.; Ponomarenko, V.I. (). Destruction of F-centers in alkali-halide crystals under two-photon absorption of pulsed laser radiation. VINITI. Deposit, no. 4206-V86, 10 June 1986. (IVUFA, no. 10, 1986, 128).

777. Libenson, M.N.; Rumyantsev, A.G. (). Cylindrical surface electromagnetic waves and the formation of radial angular surface structures. OPSPA, v. 60, no. 4, 1986, 675-677.

778. Limanov, A.B.; Givargizov, Ye.I.; Zemskiy, V.N. (IKAN). Zonal recrystallization of silicon films on fused quartz. IVNMA, no. 9, 1986, 1413-1416.

779. Lyskov, V.P.; Ryabukhin, A.V.; Skvortsov, A.K. (). Selecting a laser scribing routine in the manufacture of ceramic microcircuit boards. PRSUB, no. 9, 1986, 35.

780. Magomadov, R.M. (). Effect of optical damage in LiNbO₃-Fe crystals in polarized light. OPSPA, vol. 61, no. 4, 1986, 791-795.

781. Mašlov, K.V.; Motornaya, A.A.; Shklovskiy, V.A. (). Numerical analysis of problems of laser vitrification, allowing for the kinetics of phase transition. PFKMD, no. 6, 1986, 99-104. (RZFZA, 86/10Yell86).

782. Morichev, I.Ye.; Onokhov, A.P.; Reznichenko, V.V.; Fatulina, L.A. (GOI). Investigation of volatization in a vacuum of materials of complex compounds by a scanning laser beam. OPMPA, no. 10, 1986, 23-24.

783. Shklovskiy, V.A. (). Theory of laser vitrification, allowing for the kinetics of phase transition. PFKMD, no. 6, 1986, 91-98. (RZFZA, 86/10Yell87).

784. Tsebulya, G.G.; Lavrinovich, A.V.; Atamanenko, B.A. (). Optical properties of carbon films condensed from a laser plasma. Opticheskaya spektroskopiya i elektronnyy paramagnitnyy rezonans primesey i defektov v almaze. ISM. Kiyev, 1986, 36-41. (RZFZA, 86/10L36).

2. Metal Targets

785. Ageyev, V.P.; Allen, S.; Konov, V.I.; Mel'nikov, V.M.; Preysverk, Kh.P. (IOF). Laser deposition of metals from metal resinate films. IOF. Preprint, no. 143, 1986, 24 p. (RZFZA, 86/9Ye527).

786. Ali-Zade, I.I.; Binnatov, K.G.; Gruzin, P.L.; Petrikin, Yu.V.; Fominskiy, V.Yu. (). Laser implantation of iron into copper. Yaderno-fizicheskiye metody i ustyanovki. Moskva, 1986, 53-58. (RZFZA, 86/9Ye1091).

787. Anisimov, S.I.; Fisher, V.I. (IMET). Effect of a near-surface plasma on optical breakdown in air. Paper presented at the 114th Seminar on the Phyics and Chemistry of Materials Processing by Concentrated Energy Fluxes, 5 Dec 1985. Cited in FKOMA, no. 5, 1986, 156.

788. Arzuov, M.I.; Borodatov, S.A.; Konov, V.I.; Ral'chenko, V.G. (FIAN). Fluctuations of the dimensions of the diffuse combustion zone of metals under the action of laser radiation. KRSFA, no. 7, 1986, 7-9.

789. Ashmarin, G.M.; Aulin, V.V.; Golubev, M.Yu.; Zvonkov, S.D. (). Grain boundary interior friction of unalloyed copper, subject to continuous laser radiation. FKOMA, no. 5, 1986, 147-150.

790. Astashkevich, B.M.; Voinov, S.S.; Shur, Ye.A. (VNIIZhT). Using lasers in transportation machine building. VNIIZhT. Vestnik, no. 5, 1986, 38-41. (RZRAB, 86/10Ye458).

791. Babadzhan, Ye.I.; Lokhov, Yu.N.; Uglov, A.A. (). Pitting of a metallic surface under the action of an infrared pulse. FKOMA, no. 5, 1986, 55-58.

792. Bazhenov, V.V.; Bonch-Bruyevich, A.M.; Libenson, M.N.; Makin, V.S. (). Formation of a small-scale periodic relief on the surface of metals under the action of polarized scanning radiation. PZTFD, no. 18, 1986, 1104-1110.

793. Birjega, M.I.; Constantin, C.A.; Dinescu, M.; Florescu, I.Th.; Mihailescu, I.N.; Nanu, L.; Popescu-Pogrion, N.; Sarbu, C.; Zberea, I. (). Transformations induced by c-w CO₂ laser irradiation of polycrystalline sputtered Cr thin films (in English). RRPQA, no. 2, 1986, 177-179. (RZFZA, 86/9Ye1089).

794. Bol'shov, L.A.; Veshchunov, M.S. (IAE). Spinoid decomposition and amorphization of eutectic alloys. ZETFA, vol. 91, no. 3, 1986, 1074-1081.

795. Bonch-Bruevich, A.M.; Buzykin, O.G.; Burmistrov, A.V.; Kalabushkin, O.I.; Kaporskii, L.N.; Minayev, S.M.; Salyadinov, V.S.; Us'kov, V.M. (). Energy mass exchange during the heating of a metal in the flow of an oxidant of light pulse trains. PZTFD, no. 18, 1986, 1098-1103.

796. Bushik, S.V.; Golubev, V.S. (). Cyclic laser treatment of instrument steels. EOBMA, no. 5, 1986, 24-27.

797. Gomydova, Ye.A.; Mavleyev, F.F.; Chernyavskiy, A.D. (). Quantitative analysis of a three dimensional model of the volatization of a metallic film. FKOMA, no. 5, 1986, 51-54.

798. Gureyev, D.M.; Katulin, V.A.; Laletin, A.P.; Nikolayev, V.D.; Petrov, A.L.; Yares'ko, S.I. (). Investigation of structural transformations in a zone in KV-8 cutting alloys by pulsed laser treatment. FKOMA, no. 5, 1986, 46-50.

799. Ivanets, S.S.; Nakhodkin, N.G.; Novosel'skaya, A.I. (). Growth shapes of laser-produced island condensates of tin. PFKMD, no. 4, 1986, 102-109. (RZFZA, 86/9Ye542).

800. Ivanov, S.A.; Slepovich, I.A.; Polukhin, V.P.; Veremeyevich, A.N.; Kryanova, M.N.; Vyaz'mina, T.M. (). Strain hardening of a surface of chromium cast iron by a CO₂ laser with the use of absorbing coatings. FKOMA, no. 5, 1986, 151-152.

801. Mikheyev, Yu.V.; Gopshteyn, L.L.; Golovanov, P.A. (). Mathematical modeling of thermal treatment processes of plates from aluminum alloys by continuous YAG laser radiation. FKOMA, no. 5, 1986, 34-37.

802. Nemoshkalenko, V.V.; Tomashevskiy, N.A.; Pogorelov, A.Ye.; Mazanko, V.F.; Fal'chenko, V.M. (). Study on the processes of introducing niobium atoms into iron under laser irradiation. Metallofizika, no. 3, 1986, 22-24. (RZFZA, 86/10Yel199).

803. Nepokoychitskiy, A.G.; Bondarev, A.N.; Astashenko, S.G.; Gridnev, N.S. (). Through hole laser breakdown of thin films. ZPSBA, vol. 45, no. 4, 1986, 679-683.

804. Selishchev, S.V. (IMET). "Physics and chemistry of the treatment of materials by concentrated energy flows." December 5, 1985 seminar. FKOMA, no. 5, 1986, 156.

805. Tutunaru, M.; Mihailescu, I.N. (). Oxidation influence on the CO₂ laser radiation absorptivity by metals (in English). RRPQA, no. 3, 1986, 257-262. (RZRAB, 86/10Ye472).

806. Uglov, A.A.; Matukhnov, V.M.; Shmyreva, T.P.; Smurov, I.Yu.; Ignat'yev, M.B. (). Effect of laser radiation on instrument carbon and corrosion-resistant martensite steels. FKOMA, no. 5, 1986, 38-45.

807. Veyko, V.P.; Tabachnik, Ye.M.; Tuchkova, Ye.A. (). Experimental study on the kinetics of laser heating of thin metallic films. EOBMA, no. 5, 1986, 51-56.

808. Volod'kina, V.L.; Minayev, S.M.; Prokopenko, V.T. (LITMO). Statistical model of light-induced surface heating of oxidizing metals. VINITI. Deposit, no. 2786-V, 17 Apr 1986, 8 p. (RZFZA, 86/9Yel087).

809. Vorob'yev, A.Ya.; Kuz'michev, V.M. (KhGU). Reflection of laser radiation from a copper target with a thin plasma layer. KhGU. Vestnik, no. 285, 1986, 68-70. (RZFZA, 86/10L1101).

810. Vorob'yev, V.S. (IVTAN). Erosion flare breakdown upon quasi-steady exposure of metals to laser radiation. KVERKA, no. 9, 1986, 1909-1911.

811. Zolotukhin, A.L.; Peletskiy, V.E. (IVTAN). Experimental study on the transfer properties of MChVP molybdenum. TVYTA, no. 5, 1986, 888-891.

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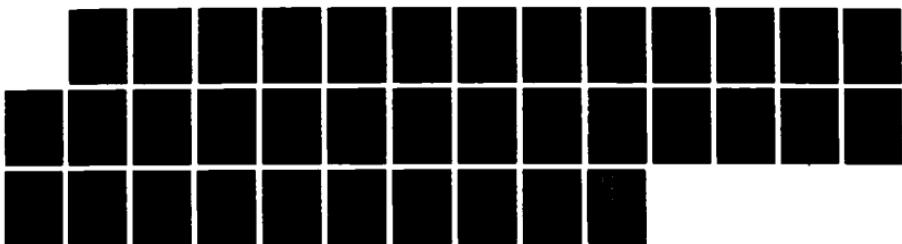
BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS NUMBER 83
SEPTEMBER - OCTOBER 1986(U) DEFENSE INTELLIGENCE AGENCY
WASHINGTON DC DIRECTORATE FOR SCI.. NOV 87

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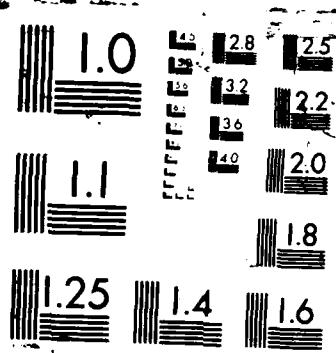
UNCLASSIFIED

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3. Dielectric Targets

812. Afanasov, P.A.; Pavlov, E.L. (). Laser cutting of cylindrical glasses (in English). *Bolgarskiy fizicheskiy zhurnal*, no. 1, 1986, 87-91. (RZRAB, 86/10Ye325).
813. Glebov, L.B.; Yefimov, O.M.; Petrovskiy, G.T. (). Absence of below-threshold ionization and the effect of accumulation during multiple exposure of glasses to laser radiation. *KVEKA*, no. 9, 1986, 1897-1901.

4. Semiconductor Targets

814. Arutyunov, Ye.N.; Vasil'yev, A.N.; Karpov, S.Yu.; Koval'chuk, Yu.V.; Myachin, V.Ye.; Sokolov, I.A. (FTI). Restitution of luminescent characteristics of implanted indium phosphide under the action of pulsed laser radiation. *PZTFD*, no. 20, 1986, 1217-1222.
815. Atakulov, Sh.B. (FGPI). Mechanism of localized-state density variation in semiconductor polycrystalline films during laser annealing. *FTPPA*, no. 9, 1986, 1710-1713.
816. Aver'yanova, M.Yu.; Karpov, S.Yu.; Koval'chuk, Yu.V.; Myachin, V.Ye.; Pogorel'skiy, Yu.V.; Pyataev, V.Z.; Sokolov, I.A. (FTI). Dynamics of the melting of crystal indium phosphide under the action of nanosecond laser pulses. *PZTFD*, no. 18, 1986, 1119-1122.
817. Bogdankevich, O.V.; Zverev, M.M.; Ivanova, T.Yu.; Kostin, N.N.; Krasavina, Ye.M.; Kryukova, I.V. (VNITSISPIV). Electron-beam and optical strength of semiconductors under pulsed excitation by a high-intensity electron beam. *KVEKA*, no. 10, 1986, 2132-2135.
818. Bonchik, A.Yu.; Gafiychuk, V.V.; Kiyak, S.G.; Savitskiy, G.V. (). Surface morphology of semiconductors under millisecond laser pulses. *PFKMD*, no. 5, 1986, 142-144. (RZFZA, 86/9Ye1073).
819. Brodin, M.S.; Reznichenko, V.Ya. (). Interaction between intense laser radiation and A(II)B(VI) semiconductors. *Fizika soyedineniy A^{sup II}B^{sup VI}*. Moskva, Nauka, 1986, 184-225. (RZFZA, 86/10L1094).
820. Bulat, L.P.; Demchishin, Ye.I. (LvPI). Electronic wind in semiconductors during abrupt temperature differences. *FTPPA*, no. 10, 1986, 1929-1931.

821. Gromov, G.G.; Rudenko, K.V.; Ufimtsev, V.B. (MITKhT). Effect of laser radiation on InSb in a liquid nitrogen medium. ZTEFA, no. 10, 1986, 1998-2000.

822. Sokolov, L.S.; Gamalya, I.A.; Samoylov, V.D.; Danileyko, V.M.; Tsulaya, N.I. (). Temperature fields of laser-heated semiconductor films. VYPMA, no. 60, 1986, 53-59. (RZFZA, 86/9L1108).

823. Vasil'yev, A.N.; Karpov, S.Yu.; Koval'chuk, Yu.V.; Myachin, V.Ye.; Pogorel'skiy, Yu.P.; Sokolov, I.A. (FTI). Anomalous behaviour of the optical characteristics of an indium phosphide alloy obtained during the action of nanosecond laser pulses. PZTFD, no. 18, 1986, 1115-1119.

824. Zaginey, A.A.; Kotlyarchuk, B.K.; Kurilov, I.V.; Plyatsko, G.V.; Savitskiy, V.G. (). Changes in the structure and morphology of the surface of HgTe crystals in the active zone of laser pulses. PFKMD, no. 6, 1986, 76-83. (RZFZA, 86/9Yel083).

K. PLASMA GENERATION AND DIAGNOSTICS

825. Akopyan, R.L.; Kuzin, V.M.; Skegin, V.L. (). The SGS56 150-channel generator of light pulses for the recording of electrical signals [to study laser fusion]. PRTEA, no. 5, 1986, 160-162.

826. Babin, S.A.; Donin, V.I.; Shapiro, D.A. (IAESOAN). Coulomb broadening of nonlinear resonances in optical spectra of ions. ZETFA, vol. 91, no. 4, 1986, 1270-1279.

827. Bazylev, B.N.; Borovik, F.N.; Vergunova, G.A.; Kas'kova, S.I.; Roaznov, V.B.; Romanov, G.S.; Stanchits, L.K.; Stepanov, K.L.; Teterev, A.V. (FIAN). Nonequilibrium emission from the plasma of laser targets. KVEKA, no. 10, 1986, 1981-1991.

828. Borovskiy, A.V.; Korobkin, V.V. (FIAN). Reabsorption of the 2-1 line and the gain criterion for the 3-2 transition of a hydrogen-like ion in a freely expanding plasma string. KRSFA, no. 9, 1986, 35-36.

829. Borovskiy, A.V.; Korobkin, V.V.; Polonskiy, L.Ya.; Pyatnitskiy, L.N.; Uvaliyev, M.I. (IVTAN). Numerical calculation of coefficients of gain and attenuation of light at transitions of hydrogen-like ions in a plasma. IVTAN. Preprint, no. 5/186, 1986, 48 p. (RZFZA, 86/9G29).

830. Bufetov, I.A.; Zherdiyenko, V.V.; Fedorov, V.B.; Fomin, V.K. (IOF). Diagnostics of plasma of an optical discharge sustained by neodymium laser radiation in the atmosphere. KVEKA, no. 9, 1986, 1875-1884.

831. Bykovskiy, Yu.A.; Gusev, V.P.; Kozyrev, Yu.P.; Kolesov, I.V.; Kutner, V.B.; Pasyuk, A.S.; Peklenkov, V.D.; Stetsenko, S.G.; Suvorov, K.G.; Uziyenko, D.A. (OIYaI). Study on the emission of multicharged ions from a laser plasma in a B vector magnetic field and their acceleration in the U-200 cyclotron. OIYaI. Preprint, no. R9-86-2, 1986, 12 p. (RZFZA, 86/9G332).

832. Bykovskiy, Yu.A.; Sil'nov, S.M. (MIFI). Ionization of atoms and ions in a laser plasma. MIFI. Preprint, no. 004, 1986, 22 p. (RZFZA, 86/10G204).

833. Bystritskiy, V.M.; Didenko, A.N. (NIIYaFT). Problems of generating high-power ion beams for inertial controlled thermonuclear fusion. IVUFA, no. 9, 1986, 3-18.

834. Bystritskiy, V.M.; Verigin, A.A.; Volkov, S.N.; Krasik, Ya.Ye.; Podkatov, V.I. (NIIYaFT). Investigation of the generation of high-power ion beams in a reflective triode with a supplementary plasma source at the anode. FIPLD, no. 9, 1986, 1113-1119.

835. Dem'yanov, A.V.; Kononov, A.V.; Linev, A.F. (KIVaI). Crater effect on the surface of a target at the output of ions from a laser plasma. KIVaI. Preprint, no. 34, 1986, 9 p. (RZFZA, 86/9G328).

836. Ganichev, S.D.; Kotel'nikov, I.N.; Mordovets, N.A.; Shul'man, A.Ya.; Yaroshetskiy, I.D. (IRE; FTI). Photoresistance effect in n-GaAs/Au tunnel transitions during plasma reflection of laser radiation. ZFPRA, vol. 44, no. 5, 1986, 234-237.

837. Garuchava, D.P.; Rostomashvili, Z.I.; Tsintsadze, N.L. (IFANG). Filament instability of relativistically intensive electromagnetic waves in plasma. KVEKA, no. 9, 1986, 1926-1928.

838. Gladkov, S.M.; Koroteyev, N.I.; Rychev, M.V.; Fedorov, A.B. (MGU). Increase in the efficiency of optical harmonic generation in a high temperature laser plasma. PZTFD, no. 20, 1986, 1272-1276.

839. Gridnev, A.G. (SFTI). Dispersion of plasma during the rapid destruction of discharge tubes. IVUFA, no. 9, 1986, 109-111.

840. Ivanov, V.A.; Prikhod'ko, A.S. (LGU). Temperature of electrons in the plasma of heavy inert gases under small electric fields. ZTEFA, no. 10, 1986, 2010-2013.

841. Kovalev, A.S.; Popov, A.M.; Seleznev, B.V.; Feoktistov, V.A. (NIIYaF). Dynamics of a near-surface plasma created by an independent source in a field of laser radiation. FIPLD, no. 9, 1986, 1120-1126.

842. Lazareva, L.Ye.; Nedorezov, V.G.; Sudov, A.S.; Kazakov, A.A.; Kezerashvili, G.Ya.; Skrinskiy, A.N.; Tumaykin, G.M.; Shatunov, Yu.M. (). Experiments with gamma quantum beams from backscattering of laser photons by electrons in the BEPP-4 accumulator. CSEVYAMS, 6th, Moskva, 10-12 Dec 1984. Trudy. Moskva, 1985, 261-269. (RZFZA, 86/10V147).

843. Margolin, L.Ya.; Marin, M.Yu.; Polonskiy, L.Ya.; Pyatnitskiy, L.N. (IVTAN). Spectral composition of radiation from a continuous elongated spark in air at atmospheric pressure. FIPLD, no. 9, 1986, 1095-1100.

844. Marin, M.Yu.; Pil'skiy, V.I.; Polonskiy, L.Ya.; Pyatnitskiy, L.N.; Spektor, B.I. (IVTAN). Formation of a planar plasma channel during optical breakdown and its use for the switching of electrodes. PZTFD, no. 17, 1986, 1072-1075.

845. Merenkov, N.P. (FTIANUk). Annihilation of scalar charged particles in a field of linearly polarized low-intensity laser radiation. UFIZA, no. 9, 1986, 1285-1293.

846. Oks, Ye.A. (). Principles of spectroscopic diagnostics of plasma with oscillating electrical fields. IZTEA, no. 9, 1986, 9-13.

847. Volenko, V.V.; Zapysov, A.L.; Ivanov, A.F.; Myalitsin, L.A.; Osadchuk, L.A. (). Production of fast particles of a laser plasma in an infrared laser field. ZETFA, vol. 91, no. 3, 1986, 804-817.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

848. Aleksandrov, Ye.B.; Zapasskiy, V.S. (). Laser magnetic spectroscopy. Lazernaya magnitnaya spektroskopiya. Series: Akademicheskiye chteniya (Academic readings). Moskva, Nauka, 1986, 280 p.

849. Applied physical optics. Prikladnaya fizicheskaya optika. MEI. Nauchnyye trudy, no. 60, 1985, pp not given. (RZFZA, 86/9L2).

850. Arsen'yev, P.A.; Bagdasarov, Kh.S.; Kurbanov, Kh.M.; Fenin, V.V. (). Growing of dielectric laser crystals. Vyrashchivaniye dielektricheskikh lazernykh kristallov. Dushanbe, Donish, 1986, 255 p. (RZFZA, 86/10L618).

851. Bobylev, B.A.; Vdovin, A.V.; Gaysler, V.A.; Kravchenko, A.F.; Palkin, A.M.; Skok, E.M.; Torchinov, Kh.Z. (auths); Skok, E.M. (ed). (). Methods for spectroscopy of semiconductors. Metody spektroskopii poluprovodnikov. IFPSOAN. Novosibirsk, 1986, 167 p.

852. Chabanov, V.Ye. (auth); Shenderov, Ye.L. (ed). (). Laser ultrasonic inspection of materials. Lazernyy ul'trazvukovoy kontrol' materialov. LGU. Leningrad, 1986, 232 p.

853. Dautov, G.Yu. (ed). (). Low-temperature plasma. Nizkotemperaturnaya plazma. KAI. Kazan', 1985, 65 p. (RZFZA, 86/10G168).

854. Demchuk, M.I.; Ivanov, M.A. (). Pulsed spectrometry. Impul'snaya spektrometriya. Minsk, Izdatel'stvo Universitetskoye, 1986, 208 p. (RZFZA, 86/9A69).

855. Georgobian, A.N.; Sheynkman, M.K. (eds). (). Physics of A^(sup II)B^(sup VI) compounds. Fizika soyedineniy A^(sup II)B^(sup VI). Moskva, Nauka, 1986, 320 p. (RZFZA, 86/9Ye4).

856. Golubev, V.S. (ed). (). Use of lasers in the national economy. All-Union conference. Transactions. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh. Trudy. Moskva, Nauka, 1986, 216 p. (RZRAB, 86/10Yel).

857. Holography in industry and scientific research. Republic Scientific and Practical Seminar, Grodno, 22-23 May 1986. Summaries of the reports. Golografiya v promyshlennosti i nauchnykh issledovaniyakh. CRNPSGPN, Grodno, 22-23 May 1986. Tezisy dokladov. Grodno, 1986, 81 p. (RZFZA, 86/9L768).

858. Kulakov, S.V. (ed). (). Acoustooptic and acoustoelectronic devices in radioelectronic systems. Akustoopticheskiye i akustoelektronnyye ustroystva radioelektronnykh sistem. FTI. Leningrad, 1985, 177 p. (RZFZA, 86/9P2).

859. Lebedeva, V.V. (). Technology of optical spectroscopy. Tekhnika opticheskoy spektroskopii. 2nd ed revised and enlarged. MGU. Moskva, 1986, 352 p. (RZFZA, 86/10A60).

860. Lukin, V.P. (auth); Tvorogov, S.D. (ed). (IOA). Atmospheric adaptive optics. Atmosfernaya adaptivnaya optika. IOA. Novosibirsk, Nauka, 1986, 157 p.

861. Nosov, Yu.R.; Shilin, V.A. (). Fundamentals of the physics of charge-coupled devices. Osnovy fiziki priborov s zaryadovoy svyaz'yu. Moskva, Nauka, 1986, 319 p. (RZFZA, 86/9A67).

862. Physics of molecular crystals. Fizika molekulyarnykh kristallov. IFANUk. Kiyev, Naukova dumka, 1986, 264 p. (RZFZA, 86/10L308).

863. Rasskazov, D.S. (ed). (). Physics of dielectric materials. Fizika dielektricheskikh materialov. MIREA. Moskva, 1985, 215 p. (RZFZA, 86/9N779).

864. Saidov, M.S. (). Photosensitive structures and solar elements based on gallium arsenide. Fotochuvstvitel'nyye struktury i solnechnyye elementy na osnove arsenida galliya. Tashkent, Fan, 1986, 144 p. (RZFZA, 86/9L664).

865. Sokolov, A.V.; Semenov, A.A. (eds). (). Electromagnetic waves in the atmosphere and outer space. Elektromagnitnyye volny v atmosfere i kosmicheskom prostranstve. Moskva, Nauka, 1986, 272 p. (RZFZA, 86/9Zh196).

866. Usikov, A.Ya. (ed). (). Electronics and radiophysics of millimeter and submillimeter radiowaves. Elektronika i radiofizika millimetrovych i submillimetrovych radiovoln. IRFENAUk. Kiiev, Naukova dumka, 1986, 366 p. (RZFZA, 86/10Zh2).

867. Voytovich, A.P. (ed). (). Republic Conference of Young Scientists on Physics in Honor of the 40th Anniversary of the Liberation of Belorussia from the German Fascist Aggressors, 8th, Minsk, 21-23 June 1984. Papers. CRKMUFOB, 8th, Minsk, 21-23 June 1984. Materialy. BGU. Minsk, 1986. Part 1, 228 p. Part 2, 180 p. (RZFZA, 86/9A33-34).

868. Working Conference on Development of Gravitational Wave Radiators and Detectors, Dubna, 25-27 June 1985. Proceedings. CRSSIDGV, Dubna, 25-27 Jun 1985. Trudy. Dubna, 1985, 171 p. (RZRAB, 86/9Ye737).

IV. SOURCE ABBREVIATIONS

(Note: CTC = cover-to-cover translation available)

AKZHA	Akusticheskiy zhurnal (CTC)
AVMEB	Avtometriya (CTC)
BWATA	Biuletyn Wojskowej akademii technicznej imeni Jaroslawa Dabrowskiego
CNTKPEEM	Nauchno-tehnicheskaya konferentsiya: Problemy ekonomiceskikh energeticheskikh material'nykh i trudovykh resursov
CRABA	Bulgarskaya akademiya nauk. Doklady (formerly: Bulgarska akademiya na naukite. Doklady)
CRKMUFOB	Respublikanskaya konferentsiya molodykh uchenykh po fizike, posvyashchennoy 40-letiyu osvobozhdeniya Belorusii ot nemetsko-fashistskikh zakhvatchikov
CRNPSGPN	Respublikanskiy nauchno-prakticheskiy seminar: Golografiya v promyshlennosti i nauchnykh issledovaniyakh
CRSSIDGV	Rabocheye soveshchaniye po sozdaniyu izluchatelya i detektora gravitatsionnykh voln
CRTED	Crystal Research and Technology (East Berlin) (formerly Krystal und Technik)
CSEVYaMS	Seminar: Elektromagnitnyye vzaimodeystviya yader pri malykh i srednykh energiyakh
CVKAVTFG	Vsesoyuznaya konferentsiya: Aktual'nyye voprosy teplofiziki i fizicheskoy gidrodinamiki
CVKFONDp	Vsesoyuznaya konferentsiya: Fizicheskiye osnovy nadezhnosti i degradatsii poluprovodnikovykh priborov
CVKPLNKh	Vsesoyuznaya konferentsiya: Primeneniye lazerov v narodnom khozyaystve
CVSSElek	Vsesoyuznyy simpozium po sil'notochnoy elektronike

DANAA	Akademiya nauk Armyanskoy SSR. Doklady
DANKA	Akademiya nauk SSSR. Doklady (CTC)
DAZRA	Akademiya nauk Azerbaydzhanskoy SSR. Doklady
DBLRA	Akademiya nauk BSSR. Doklady
DEFKA	Defektoskopiya (CTC)
DUKAB	Akademiya nauk Ukrayns'koy RSR. Dopovidi. Seriya A. Fiziko-matematychni ta tekhnichni nauki
ELKCA	Elektrotechnicky casopis
EOBMA	Elektronnaya obrabotka materialov (CTC)
ETFMB	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
FIPLD	Fizika plazmy (Moskva, AN SSSR) (CTC)
FKOMA	Fizika i khimiya obrabotki materialov
FNMKA	Finomechanika, mikrotechnika (Budapest)
FTPPA	Fizika i tekhnika poluprovodnikov (CTC)
FTVTA	Fizika tverdogo tela (CTC)
GEAEA	Geomagnetizm i aeronomiya (CTC)
GTPZA	Gigiyena truda i professional'nyye zabolеваниya
GZKGA	Geodeziya i kartografiya (CTC)
IAAFA	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IANFA	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya (CTC)
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
INFZA	Inzhenerno-fizicheskiy zhurnal (CTC)
IVNMA	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy (CTC)

IVUBA	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVUZB	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)
IZFMB	Akademiya nauk Moldavskoy SSR. Izvestiya. Seriya fiziko-tehnicheskikh i matematicheskikh nauk
IZSTA	Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk.
IZTEA	Izmeritel'naya tekhnika (CTC)
JMKOA	Jemna mechanika a optika
KHFID	Khimicheskaya fizika (CTC)
KHVKA	Khimiya vysokikh energiy (CTC)
KRISA	Kristallografiya (CTC)
KRSFA	Kratkiye soobshcheniya po fizike (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)
LFSBA	Litovskiy fizicheskiy sbornik (CTC)
MKMAD	Mekhanika kompozitnykh materialov (Riga)
MTRLB	Metrologiya
NACHA	Nachrichtentechnik-Elektronik (GDR)
OKNOA	Okeanologiya (CTC)
OPMPA	Optiko-mekhanicheskaya promyshlennost' (CTC)
OPSPA	Optika i spektroskopiya (CTC)
OTIZD	Otkrytiya, izobreteniya (formerly included in OIPOB)

PFKMD	Poverkhnost'. Fizika, khimiya, mekhanika (Moskva)
PRSUB	Pribory i sistemy upravleniya (CTC)
PRTEA	Pribory i tekhnika eksperimenta (CTC)
PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PTGEA	Problemy teorii gravitatsii i elementarnykh chashtits (sbornik, Moskva)
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)
RAELA	Radiotekhnika i elektronika (journal, Moskva) (CTC)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RRPQA	Revue Roumaine de Physique
RTKHA	Radiotekhnika (sbornik, Khar'kov)
RZETA	Rozprawy elektrotechniczne
RZFZA	Referativnyy zhurnal. Fizika
RZGFA	Referativnyy zhurnal. Geofizika
RZRAB	Referativnyy zhurnal. Radiotekhnika
SCEFA	Studii si cercetari de fizica
SOMEA	Sovetskaya meditsina
TVOOB	Tekhnika i vooruzheniye (CTC)
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFIZA	Ukrainskiy fizicheskiy zhurnal (Russian language version) (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
VANSA	Akademiya nauk SSSR. Vestnik (CTC)
VBSFA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk

VEOFA	Vestnik oftal'mologii
VMEZA	Voyenno-meditsinskiy zhurnal (CTC)
VMUFA	Moskovskiy universitet. Vestnik. fizika, astronomiya (CTC)
VMUKA	Moskovskiy universitet. Vestnik. Khimiya (CTC)
VYPMA	Vychislitel'naya i prikladnaya matematika (sbornik, Kiyev)
VYSBA	Vysokomolekulyarnyye soyedineniya. Seriya B. Kratkiye soobshcheniya
WZHMA	Wissenschaftliche Zeitschrift der Humboldt Universitaet zu Berlin. Mathematisch-naturwissenschaftliche Reihe (East Berlin)
ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNPFA	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii (CTC)
ZPMFA	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki (CTC)
ZPSBA	Zhurnal prikladnyy spektroskopii (CTC)
ZRBEA	Zarubezhnaya radioelektronika
ZTEFA	Zhurnal tekhnicheskoy fiziki (CTC)
ZVDLA	Zavodskaya laboratoriya (CTC)
ZVMFA	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki (CTC)

V. AUTHOR AFFILIATIONS

AKIN

Akusticheskiy institut AN SSSR
Acoustics Institute, Academy of Sciences USSR

AlGU

Altayskiy gos universitet
Altai State University, Barnaul

API

Altayskiy politekhnicheskiy institut
Altay Polytechnical Institute, Barnaul

BGU

Belorusskiy gos universitet
Belorussian State University

Chermetinform

TsNII informatsii i tekhniko-ekonomiceskikh
issledovaniy chernoy metallurgii Ministerstva
chernoy metallurgii SSSR, Moscow
Central Scientific Research Institute of Information
and Technical Economic Studies on Ferrous Metallurgy,
USSR Ministry of Ferrous Metallurgy, Moscow

ChGU

Chernovitskiy gosudarstvennyy universitet
Chernovitsy State University

DalPI

Dal'nevostochnyy politekhnicheskiy institut
Far East Polytechnical Institute

DBMZhD

Dorozhnaya bol'nitsa No. 1 imeni N.A. Semashko
Moskovskoy zheleznoy dorogi Ministerstva putey
soobshcheniya SSSR
Railroad Hospital No. 1 imeni N.A. Semashko,
Moscow Railroad, USSR Ministry of Railroads

DVGU

Dal'nevostochnyy gos universitet
Far Eastern State University, Vladivostok

DzHTILPP

Dzhambul'skiy tekhnologicheskiy institut
legkoy i pishchevoy promyshlennosti
Dzhambul Technological Institute of
Light Industry and Food Industry

FGPI

Ferganskiy gosudarstvennyy pedagogicheskiy institut
im. Ulugbeka
Fergana State Pedagogical Institute im. Ulugbeka

FIAN

Fizicheskiy institut im Lebedeva AN SSSR
Physics Institute imeni Lebedev, Academy of Sciences
USSR, Moscow

FKhI

Fiziko-khimicheskiy institut AN Ukr SSR
Institute of Physical Chemistry, Academy of Sciences Ukrainian
SSR

FTI

Fiziko-tehnicheskiy institut im Ioffe AN SSSR
Physicotechnical Institute im Ioffe, Academy of
Sciences USSR, Leningrad

FTIANUK

Fiziko-tehnicheskiy institut AN UkrSSR
Physicotechnical Institute, Academy of Sciences
Ukrainian SSR, Khar'kov

FTIUNTS

Fiziko-tehnicheskiy institut Ural'skogo nauchnogo
tsentra AN SSSR
Physicotechnical Institute, Ural Scientific Center,
Academy of Sciences USSR, Izhevsk

GEOKhI

Institut geokhimii i analiticheskoy khimii
im Vernadskogo AN SSSR
Institute of Geochemistry and Analytical Chemistry
imeni Vernadskiy, Academy of Sciences USSR, Moscow

GGU

Gor'kovskiy gos universitet
Gor'kiy State University

GIFTI

Gor'kovskiy issledovatel'skiy fiziko-tehnicheskiy
institut pri Gor'kovskom gos. universite
Gor'kiy Physicotechnical Research Institute at
Gor'kiy State University

GiprougleavtDO

Donetskoye otdeleniye Gosudarstvennogo proyektno-
konstruktorskogo i NII po avtomatizatsii ugol'noy
promyshlennosti

Donetsk Branch of the State Planning and Design and
Scientific Research Institute of Automation of the
Coal Industry

GOI

Gosudarstvennyy opticheskiy institut im Vavilova
State Optical Institute imeni Vavilov, Leningrad

GrodGU

Grodnenskiy gos universitet
Grodno State University

GruzNIINTI

Gruzinskiy NII nauchno-tehnicheskoy informatsii i
tekhniko-ekonomiceskikh issledovaniy Goskomiteta
Soveta Ministrov GSSR po naute i tekhnike
Georgian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Committee on Science and
Technology of the Council of Ministers of the
Georgian SSR, Tbilisi

IAE

Institut atomnoy energii im Kurchatova
Institute of Atomic Energy imeni Kurchatov, Moscow
IAESOAN

Institut avtomatiki i elektrometrii SOAN
Institute of Automation and Electronic Measurements,
Siberian Branch Academy of Sciences USSR

IEANUZ

Institut elektroniki AN UzSSR
Institute of Electronics, Academy of Sciences
Uzbek SSR, Tashkent

IFA

Institut fiziki atmosfery AN SSSR
Institute of Atmospheric Physics, Academy of
Sciences, USSR

IFANAZ

Institut fiziki AN AzSSR
Institute of Physics, Academy of Sciences
Azerbaijan SSR

IFANB

Institut fiziki AN BSSR
Institute of Physics, Academy of Sciences
Belorussian SSR, Minsk

IFANG

Institut fiziki AN GruzSSR
Institut of Physics, Academy of Sciences Georgian SSR,
Tbilisi

IFANLa

Institut fiziki AN LatSSR
Institut of Physics, Academy of Sciences Latvian SSR,
Salaspils

IFANUk

Institut fiziki AN UkrSSR
Institute of Physics, Academy of Sciences Ukrainian SSR,
Kiev

IFI

Institut fizicheskikh issledovaniy AN ArmSSR
Institute of Physics Research, Academy of Sciences
Armenian SSR

IFPSOAN

Institut fiziki poluprovodnikov SOAN
Institute of Semiconductor Physics, Siberian Branch
Academy of Sciences USSR, Novosibirsk

IFSOAN

Institut fiziki SOAN
Institute of Physics, Siberian Branch Academy of
Sciences USSR, Krasnoyarsk

IFTT

Institut fiziki tverdogo tela AN SSSR
Institute of Solid State Physics, Academy of
Sciences USSR, Chernogolovka

IFVE

Institut fiziki vysokikh energiy
Institute of High Energy Physics, Serpukhov

IGTPZ

Leningradskiy NII gigiyeny truda i profzabolevaniy
Leningrad Scientific Research Institute of
Occupational Health and Occupational Diseases

IKAN

Institut kristallografii AN SSSR
Institute of Crystallography, Academy of Sciences
USSR, Moscow

IKGr

Institut kibernetiki AN GruzSSR
Institute of Cybernetics, Academy of Sciences
Georgian SSR

IKhF

Institut khimicheskoy fiziki AN SSSR
Institute of Physics of Chemistry, Academy of Sciences
USSR, Chernogolovka

IMET

Institut metallurgii im Baykova
Institute of Metallurgy imeni Baykov, Moscow

INBYuM

Institut biologii yuzhnykh morey AN UkrSSR
Institute of the Biology of the Southern Seas,
Academy of Sciences Ukrainian SSR, Sevastopol'

INEOS

Institut elementoorganicheskikh soyedineniy
AN SSSR
Institute of Organoelemental Compounds,
Academy of Sciences USSR, Moscow

IOA

Institut optiki atmosfery SOAN
Institute of Atmospheric Optics, Siberian Branch
Academy of Sciences USSR

IOAN

Institut okeanologii AN SSSR
Institute of Oceanography, Academy of Sciences
USSR, Moscow

IOF

Institut obshchey fiziki AN SSSR
Institute of General Physics, Academy of Sciences
USSR, Moscow

IOKhK

Institut organicheskoy khimii AN UkrSSR
Institute of Organic Chemistry, Academy of Sciences
Ukrainian SSR, Kiev

IONKhANB

Institut obshchey i neorganicheskoy khimii AN BSSR
Institute of General and Inorganic Chemistry, Academy
of Sciences Belorussian SSR

IPANUK
Institut poluprovodnikov AN UkrSSR
Institute of Semiconductors, Academy of Sciences
Ukrainian SSR, Kiev

IPF
Institut prikladnoy fiziki AN SSSR
Institute of Applied Physics, Academy of Sciences
USSR, Gor'kiy

IPFANM
Institut prikladnoy fiziki AN MSSR
Institute of Applied Physics, Academy of Sciences
Moldavian SSR, Kishinev

IPM
Institut prikladnoy matematiki AN SSSR
Institute of Applied Mathematics, Academy of Sciences
USSR

IPMe
Institut problem mekhaniki AN SSSR
Institute of Problems of Mechanics, Academy of Sciences
USSR, Moscow

IPP
Institut problemy prochnosti AN UkrSSR
Institute for Problems of Strength of Materials,
Academy of Sciences Ukrainian SSR, Kiev

IRE
Institut radiotekhniki i elektroniki AN SSSR
Institute of Radioengineering and Electronics, Academy
of Sciences USSR, Moscow

IRFEANUK
Institut radiofiziki i elektroniki AN UkrSSR
Institute of Radiophysics and Electronics, Academy of
Sciences Ukrainian SSR

IRGSZh
Institut razvedeniya i genetiki
sel'skokhozyaystvennykh zhivotnykh
Institute of Breeding and Genetics of
Farm Animals, Leningrad

ISAN
Institut spektroskopii AN SSSR
Institute of Spectroscopy, Academy of Sciences USSR

ISE
Institut sil'notochnoy elektroniki SOAN
Institute of High-Current Electronics, Siberian Branch
Academy of Sciences USSR, Tomsk

ISM
Institut sverkhtverdykh materialov AN UkrSSR
Institute of Superhard Materials, Academy of Sciences
Ukrainian SSR, Kiev

ITF
Institut teplofiziki SOAN
Institute of Thermophysics, Siberian Branch Academy of
Sciences USSR, Novosibirsk

ITFL

Institut teoreticheskoy fiziki im Landau AN SSSR
Institute of Theoretical Physics imeni Landau,
Academy of Sciences USSR, Chernogolovka

ITMO

Institut teplo- i massoobmena AN BSSR
Institute of Heat and Mass Exchange, Academy of Sciences
Belorussian SSR

ITPM

Institut teoreticheskoy i prikladnoy mekhaniki SOAN
Institute of Theoretical and Applied Mechanics, Siberian
Branch Academy of Sciences USSR, Novosibirsk

IVTAN

Institut vysokikh temperatur AN SSSR
Institute of High Temperatures, Academy of Sciences USSR

IYaFSOAN

Institut yadernoy fiziki SOAN
Institute of Nuclear Physics, Siberian Branch Academy of
Sciences USSR, Novosibirsk

IzhGMI

Izhevskiy gos meditsinskiy institut
Izhevsk State Medical Institute
(city renamed Ivanov Dec 84, original name
Izhevsk restored Jun 87)

KAI

Kazanskiy aviatsionnyy institut
Kazan' Aviation Institute

KGU

Kiyevskiy gos universitet
Kiev State University

KhGU

Khar'kovskiy gos universitet
Khar'kov State University

KhIIZhTDF

Donetskiy filial Khar'kovskogo instituta inzhenerov
zheleznodorozhного transporta
Donetsk Branch of the Khar'kov Institute of Railroad
Transport Engineers

KiGU

Kishinveskiy gos universitet
Kishinev State University

KIYAI

Institut yadernykh issledovaniy AN UkrSSR
Institute of Nuclear Research, Academy of
Sciences Ukrainian SSR, Kiev

KNIKIPO

Kiyevskiy NI i konstruktorskiy institut
periferiynogo oborudovaniya
Kiev Scientific Research and Design Institut
of Peripheral Equipment

KPI

Kishinevskiy politekhnicheskiy institut
Kishinev Polytechnic Institute

LatGU

Latviyskiy gos universitet
Latvian State University

LETI

Leningradskiy elektrotekhnicheskiy institut
Leningrad Electric Engineering Institute

LGU

Leningradskiy gos universitet
Leningrad State University

LIAP

Leningradskiy institut aviatsionnogo priborostroyeniya
Leningrad Institute of Aviation Instrument Manufacture

LITMO

Leningradskiy institut tochnoy mekhaniki i optiki
Leningrad Institute of Precision Mechanics and Optics

LMI

Pervyy Leningradskiy meditsinskiy institut
im I.P. Pavlova
First Leningrad Medical Institute imeni
I.P. Pavlov

LPI

Leningradskiy politekhnicheskiy institut
Leningrad Polytechnic Institute

LSGMI

Leningradskiy sanitarno-gigiyenicheskiy
meditsinskiy institut
Leningrad Medical Institute of Public Health

LTITsBP

Leningradskiy tekhnologicheskiy institut
tsellyulozno-bumazhnoy promyshlennosti
Leningrad Technological Institute of the
Wood-Pulp and Paper Industry

LvGU

L'vovskiy gos universitet
L'vov State University

LvPI

L'vovskiy politekhnicheskiy institut
L'vov Polytechnic Institute

MEI

Moskovskiy energeticheskiy institut
Moscow Power Engineering Institute

MEISF

Smolenskiy filial Moskovskogo energeticheskogo
instituta
Smolensk Branch of the Moscow Power Engineering
Institute

MFTI

Moskovskiy fiziko-tekhnicheskiy institut
Moscow Physicotechnical Institute

MGDKBol

Moskovskaya gorodskaya detskaya klinicheskaya bol'nitsa
Moscow Municipal Children's Clinical Hospital

MGMIVt

Vtoroy Moskovskiy gos meditsinskiy institut
im Pirogova
Second Moscow State Medical Institute imeni Pirogov

MGU

Moskovskiy gos universitet
Moscow State University

MIFI

Moskovskiy inzhenerno-fizicheskiy institut
Moscow Engineering Physics Institute

MIIGAiK

Moskovskiy institut inzhenerov geodezii,
aerofotos"yemki i kartografii
Moscow Institute of Engineers of Geodesy,
Aerial Photography and Cartography

MIREA

Moskovskiy institut radiotekhniki, elektroniki i
avtomatiki
Moscow Institute of Radio Engineering, Electronics
and Automation

MISIS

Moskovskiy institut stali i splavov
Moscow Institute of Steel and Alloys

MITKhT

Moskovskiy institut tonkoy khimicheskoy tekhnologii
imeni Lomonosova
Moscow Institute of Fine Chemical Technology
imeni Lomonosov

MNII

Moskovskiy NII glaznykh bolezney im Gel'mgol'tsa
Moscow Scientific Research Institute of Eye Diseases
imeni Gel'mgol'ts

MoldNIINTI

Moldavskiy NII nauchno-tehnicheskoy informatsii i
tekhniko-ekonomiceskikh issledovaniy Gosplana MSSR
Moldavian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Plan of the Moldavian SSR,
Kishinev

NGU

Novosibirskiy gos universitet
Novosibirsk State University

NIFKhI

NI fiziko-khimicheskiy institut im Karpova
Scientific Research Institute of
Physicochemistry imeni Karpov

NIIFKS

NII fiziki kondensirovannykh sred Yerevanskogo
gos universiteta

Scientific Research Institute of the Physics of
Condensed Media of Yerevan State University

NIIFL

NII fiziki pri Leningradskom gos universitete
Scientific Research Institute of Physics at Leningrad
State University

NIIGAiK

Novosibirskiy institut inzhenerov geodezii,
aerofotos"yemki i kartografii

Novosibirsk Institute for Engineers of Geodesy,
Aerial Surveying and Cartography

NIIMF

NII mekhaniki i fiziki Saratovskogo GU
Scientific Research Institute of Mechanics and
Physics of Saratov State University

NIIPFI

NII prikladnoy fiziki pri Irkustskom gos universitete
Scientific Research Institute of Applied Physics at
Irkutsk State University

NIIPFP

NII prikladnykh fizicheskikh problem pri
Belorusskom gos universitete
Scientific Research Institute of Applied Physics
Problems at Belorussian State University

NIIAvtoprom

NII tekhnologii avtomobil'noy promyshlennosti, Moskva
Scientific Research Institute of the Technology of the
Automobile Industry

NIIYaF

NII yadernoy fiziki pri Moskovskom gos universitete
Scientific Research Institute of Nuclear Physics at
Moscow State University

NIIYaFT

NII yadernoy fiziki pri Tomskom politekhnicheskem
institute
Scientific Research Institute of Nuclear Physics
at Tomsk Polytechnic Institute

NIOPIK

NII organicheskikh poluproduktov i krasiteley
Scientific Research Institute of Organic
Intermediates and Dyes, Moscow

NITsTLAN

NI tsentr po tekhnologicheskim lazeram AN SSSR
Scientific Research Center for Industrial Lasers,
Academy of Sciences USSR

NSKNO

Nauchnyy sovet AN SSSR po probleme "Kogerentnaya i
nelineynaya optika"

Scientific Council on Coherent and Nonlinear Optics,
Academy of Sciences USSR.

OGU

Odesskiy gos universitet
Odessa State University

OIYaI

Ob"yedinennyi institut yadernykh issledovaniy
Joint Institute of Nuclear Research, Dubna

RGU

Rostovskiy-na-Donu gos universitet
Rostov on Don State University

RISI

Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut
Rostov-on-Don Civil Engineering Institut

RTI

Radiotekhnicheskiy institut AN SSSR
Radioengineering Institute, Academy of Sciences
USSR, Moscow

SFTI

Sibirskiy fiziko-tehnicheskiy institut im Kuznetsova
Siberian Physicotechnical Institute imeni Kuznetsov,
Tomsk

SGU

Saratovskiy gos universitet
Saratov State University

SKBMvP

Spetsial'noye konstruktorskoye byuro
mikroelektroniki v priborostroyenii
Special Design Bureau for Microelectronics
in Instrument Manufacture, L'vov

SZPI

Severo-zapadnyy zaochnyy politekhnicheskiy institut
Northwestern Correspondence Polytechnic Institute,
Leningrad

TashGU

Tashkentskiy gos universitet
Tashkent State University

TIASUR

Tomskiy institut avtomatizatsii sistem upravleniya
i radioelektroniki
Tomsk Institute for Automation of Control Systems
and Radioelectronics

ToGPI

Tomskiy gos pedagogicheskiy institut
Tomsk State Pedagogical Institute

ToPI

Tomskiy politekhnicheskiy institut
Tomsk Polytechnic Institute

TPI

Tallinskiy politekhnicheskiy institut
Tallinn Polytechnic Institute

TsNIIIE

Tsentral'nyy NII "Elektronika"
"Elektronika" Central Scientific Research Institute,
Moscow

UFNIIGB

Ufimskiy NII glaznykh bolezney
Ufa Scientific Research Institute of Eye Diseases

UkrNIINTI

Ukrainskiy NII nauchno-tehnicheskoy informatsii i
tekhniko-ekonomicheskikh issledovaniy Gosplana
UkrSSR

Ukrainian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Plan of the Ukrainian SSR, Kiev

UzhGU

Uzhgorodskiy gos universitet
Uzhgorod State University

VilGU

Vil'nyusskiy gos universitet
Vilnius State University

VINITI

Vsesoyuznyy institut nauchnoy i tekhnicheskoy
informatsii
All-Union Institute of Scientific and Technical
Information, Moscow

VISI

Voronezhskiy inzhenerno-stroitel'nyy institut
Voronezh Engineering Institute

VLTI

Voronezhskiy lesotekhnicheskiy institut
Voronezh Forestry Institute

VNIFTRI

VNII fiziko-tehnicheskikh i radiotekhnicheskikh
izmereniy
All-Union Scientific Research Institute of Physico-
technical and Radiotechnical Measurements, Moscow

VNIIGBol

VNII glaznykh bolezney
All-Union Scientific Research Institute of
Eye Diseases, Moscow

VNIIM

VNII metrologii im Mendeleyeva
All-Union Scientific Research Institute of Metrology
imeni Mendeleyev, Leningrad

VNIIMono

VNII monokristallov, stsintillyatsionnykh materialov
i osobo chistykh khimicheskikh veshchestv
All-Union Scientific Research Institute of Single
Crystals, Scintillation Materials and Extra Pure
Chemical Substances, Khar'kov

VNIIOFI

VNII optiko-fizicheskikh izmereniy
All-Union Scientific Research Institute of
Optophysical Measurements, Moscow

VNIIZhT

VNII zheleznodorozhnogo transporta
All-Union Scientific Research Institute of Railroad
Transportation, Moscow

VNITsISPIV

VNI tsentr po izucheniyu svoystv poverkhnosti i vakuma
All-Union Scientific Research Center for Studying the
Properties of Surfaces and Vacuums, Moscow

VTsSOAN

Vychislitel'nyy tsentr SOAN
Computer Center, Siberian Branch Academy of Sciences
USSR

YeGU

Yerevanskiy gos universitet
Yerevan State University

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BUBIS YE L	28	CHUMAKOV B N	13	D'YAKONOV V P	17
BUDZIAK A	61	CHUPANOV A I	62	DYATLOV A I	52
BUFETOV I A	89	CHURAYEV A L	54,56	DYKMAN M I	69
BUGAYEV A A	69,82	CHURBANOV M F	43	DYUBKO S F	12
BUGAYEVA T V	3	CHURKIN YU V	67	DZHALIASHVILI O A	37
BUISHVILI L L	82	CHUSOV I I	3	DZHIDZHOYEV M S	33,34
BUKATYY V I	48,49	COJOCARU E	35	DZHOTYAN G P	7
BUKHALOVA G A	1	CONSTANTIN C A	85		
BUKHENSKIY M F	36	CORRADI G	59	EBERHARDT V	62
BUKHMAN N S	30,45	CSONIOS Z	3	EBRALIDZE T D	70
BULAT L P	87	CTYROKI J	31	EPPERT H	39
BULATOV V P	49	CUCHY Z	65	ERGASHEV R	80
BULATOV YE D	53	CZERNEY P	7	ETSIN I SH	64
BULGAKOV A A	20	CZESZKO J	2,22		
BUNE A V	69			FADEYEV V V	29
BUNKIN F V	13,24,56,57	DABAGYAN A A	75	FAL'CHENKO V M	86
BURAKOV S D	15	DANILEYKO M V	36	FAREASAN M	57
BURAKOV V S	76	DANILEYKO N M	16	FATKULINA L A	83
BUREYEV V A	51	DANILEYKO V M	88	FAUSTOV V I	58
BURIC M	42	DANILYCHEV V A	10,12,13,17	FECHNER R	40
BURIMOV V N	56	DASZKIEWICZ M	62	FEDENEV A V	18
BURITSKIY K S	39	DATSYUK V V	36	FEDOROV A B	89
BURKITBAYEV S M	76	DAUTOV G YU	91	FEDOROV A S	62
BURKOV V I	62	DAVYDOV M A	29	FEDOROV A V	70
BURLAK G N	31,39	DE S T	54	FEDOROV S V	11
BURMAKOV A P	62	DEDNEVA G P	44	FEDOROV S YE	40
BURMISTROV A V	85	DEGODA V YA	33	FEDOROV V B	89
BUROV L I	7,76	DELYUKOV A A	70	FEDOROV V V	73
BUSHIK S V	85	DEMCHENKO N P	39	FEDOROVICH V YU	32
BUSHUK B A	76	DEMCHISHIN YE I	87	FEDORTSOV A B	67
BUTENIN A V	82	DEMCHUK M I	34,91	FEDOSEYEV V N	74
BUYANOV V M	76	DEM'YANENKO A V	76	FEDOSEYeva N V	72
BUYANOVA I A	69	DEM'YANENKO P A	39	FEDOTOV V G	14
BUZYKIN O G	85	DEM'YANOV A V	89	FEDYANINA YE L	65
BYCHKOV S I	21	DENEZHKN YE N	54	FEL'D S YA	39
BYKOVSKIY YU A	54,76,89	DENISOV G G	35	FENIN V V	91
BYSTRITSKIY V M	89	DENK J	42	FEOKTISTOV V A	18,90
CHABANOV V YE	91	DERBOV V L	24	FERBER R S	69,78
CHAGIN A A	18	DERZHIEV V I	11	FESENKO L D	8
CHAMOROVSKIY YU K	40	DESYATYKH YU M	8,13	FETISOV S P	58
CHARUKHCHEV A V	6	DEVERILIN YU A	62	FILIMONOV A A	2,3
CHASHECHKIN YU D	63	DEVYATYKH G G	61	FILIMONOV YU V	49
CHAYKIN A M	57	DEYEV V N	43	FILIPPOV A N	48
CHAYKOVSKAYA L I	47	DIANOV YE M	31	FILIPPOV O K	64
CHAYKOVSKIY A P	49	DIDENKO A N	28,43	FILIPPOV V V	31
CHEBOTAREV A P	4	DIMITROV N K	9,14,89	FINKEL'SHTEYN S YE	51
CHEBUNIN V G	66	DINESCU M	39	FIRSOV K N	17
CHEKALIN S V	79	DITTMAR G	85	FISHER V I	84
			22	FLORESCU I TH	85

KALABUSHKIN O I	85	KHOREYAN R G	40	KONDRATENKO P S	27
KALININ V N	80	KHOROSHILOV YE V	14	KONDRATYUK N V	1
KALININ V P	10	KHOROSHILOVA YE V	57	KONNIKOV S G	35
KALININA O D	46	KHORVAT Z	59	KONONENKO A A	38
KALITEYEVSKIY N I	36	KHOTYAINTEV V N	21	KONONOV A V	89
KALITIN S P	3	KHRAMOVICH YE M	46,55	KONONOVA I N	81
KALIYA O L	8	KHRAMTSOV P P	41	KONOPAC V	44
KAMALOV SH R	28	KHROMOV I YE	80	KONOTOPOV A N	68
KAMINSKIY A A	1,2,3	KHRYASHCHEV L YU	71	KONO V I	84
KANATENKO M A	17	KHULUGUROV V M	1	KONSTANTINOV A V	78
KANDIDOV V P	16,59	KHVOSTIKOV V P	35	KONTOROV M D	41
KANORSKIY S I	76	KIKKARIN S M	31	KOPAY-GORA A P	9
KAPORSKIY L N	85	KILZ I	18	KOPYLOV YU L	22
KAPRALOVA G A	57	KIMTIS L L	78	KOPYLOVA YE K	33,74
KAPUSTIN V V	17	KIRICHENKO N A	56,57	KOPYTOV G F	70
KARAMZIN YU N	26	KIRILENKO A I	39	KORABLEVA YE YU	28
KARAPETYAN G O	40	KIRILENKO YE K	59	KOROBKIN V V	88
KARASEV V B	44	KIRILOV A YE	50	KOROCHIGOVA S A	76
KARASIK V YE	20	KIRKIN A N	26	KOROLENKO P V	17
KARAVAYEV S M	5	KIRMUSOV I P	13	KOROLEV I YA	51
KARGIN B A	49	KISELEV YU B	69	KOROLEV N YE	33
KARMENYAN A V	7,34	KISELEVA I N	28	KOROLEV V N	4
KARPENKO V A	41	KISELEVA O V	55	KOROL'KOV K S	36
KARPOV N A	76	KISELEVSKIY L I	55	KOROTAYEV YU A	18
KARPOV S YU	87,88	KITAYEV N P	63	KOROTEYEV N I	89
KARPOVA G V	63	KITAYEVA V F	32	KOROVIN L I	69
KARPUKHIN S N	52	KITYK A V	67	KOROVIN S D	35
KARSPAROV K N	81	KITZE L	41	KOROVKIN V V	41
KASHKAROV P K	70	KIYACHENKO YU F	76	KORRADI G	59
KAS'KOVA S I	88	KIYAK S G	87	KORROVITS V	78
KASYARUM O P	71	KLEHER A	40	KORSAKOV YE G	64
KATANAYEV I I	21	KLEINERT H	43	KORSHAK V V	83
KATAYEV I G	24	KLEMENTI T I	14	KORSHUNOV G S	70
KATORGIN B I	19	KLEMENTOV A D	49	KORSUNSKAYA N YE	4
KATRICH A B	14	KLEYBANOV M S	73	KORVATOVSKIY B N	34,38
KATSEV I L	46	KLIMA M	31	KOSENKO N K	64
KATSNEL'SON L A	47	KLIMKIN V F	63	KOSICHKIN YU V	48
KATSNEL'SON L B	37	KLIMKOV YU M	59	KOSMACHEV A F	41
KATULIN V A	78	KLIMOVA L G	16	KOSOV A V	81
KAZAK N S	63,85	KLIMUSHEVA G V	70	KOSTAL E	31
KAZAKOV A A	27,78	KLINGER A	42	KOSTIN N N	87
KAZAKOV A YA	90	KLITSOVA ZH I	66	KOSTOLOMOV A F	10
KAZANTSEV A P	67	KLOCHAN YE L	16	KOSTYSHIN M T	71
KAZARYAN M A	24	KLOCHKO A I	10	KOSTYUKEVICH YE A	64
KEDZIERSKI W	68,83	KLOCHKOV V P	64	KOSULIN N L	71
KEILIG W	61	KLOKOVA M YE	5	KOTEL'NIKOV D S	11
KEIPER R	41	KNEPO I	22	KOTEL'NIKOV I N	89
KERIMOV O M	73	KNORRE K G	62	KOTEL'NIKOV V A	36
KERSTAN F	13,17	KOBLYANSKIY YU V	55	KOTLIKOV YE N	71,78
KEZERASHVILI G YA	63,69	KOCHAROVSKAYA O A	16	KOTLYARCHUK B K	88
KHACHATRYAN A KH	90	KOCHELAP V A	14,36	KOTLYAREVSKIY M B	62,70
KHACHATRYAN R ZH	26	KOCHETOV I V	11	KOTOV V A	62
KHALEYEV M M	27	KOCHETOV YE A	24	KOTSARENKO N YA	31,39
KHANDOGIN V A	2	KOGAN B YA	82	KOVACH D SH	80
KHANNANOV N K	54	KOGAN M YE	37	KOVAL' N N	18
KHANOV V A	57	KOKHANENKO G P	50	KOVAL'CHUK YU V	87,88
KHARCHEV A V	10	KOKODIY N G	46,60	KOVALENKO K V	52
KHARLAMOV B M	4	KOKSCH P	43	KOVALENKO YE S	17
KHAR'YA Y A A	74	KOLESNIK A I	51	KOVALEV A A	33,71
KHATYREV N P	78	KOLESNIK A V	62	KOVALEV A M	64
KHAYRETDINOV K A	20	KOLESOV I V	89	KOVALEV A S	18,90
KHEL'BIG R	5	KOLIN'KO V G	64	KOVALEV N F	35
KHIZHNYAK A I	72	KOLOBRODOV V G	78	KOVALEV V I	52
KHIZHNYAKOV V	29	KOLOMIYETS V V	71	KOVALEVSKIY YE D	37
KHODINSKIY A N	24	KOLOSNITSYN N I	60	KOVTUN V R	20
KHOKHLENKO YU L	31	KOLOSOV YE YE	72	KOVTYAK D S	41
KHOLIN I V	9	KOLOVSKIY A R	3	KOZAK G YU	7
KHOLODNYKH A I	12	KOLTAI F	61	KOZEL S M	40
KHOLODNYY D S	50	KOMAROV S A	67	KOZHEVNIKOV N M	54
KHOLODOK N L	74	KOMAROVSKIY K F	78	KOZHEVNIKOVA I N	29
KHOLUDEV I S	53	KOMAROVSKIY V A	49	KOZLOV A I	32
	73	KOMLYAKOV V V		KOZLOV G V	20

KOZLOVSKIY YU YA	21	KUTAKHOV V P	63	LEVIN P P	57
KOZYREV YU P	89	KUTLIN A P	45,46	LEVIT A D	73
KRASAVINA YE M	87	KUTNER V B	89	LEVIT A L	58
KRASHENINNIKOV V V	11	KUTSAYENKO V V	40	LEYMAN V I	68
KRASIK YA YE	89	KUTUKOV V I	32	LIBENSON M N	83,84
KRASNIKOV V V	28	KUZIN A YU	63	LIKHANSKIY V V	29,51
KRASNIKOV YU I	18	KUZIN V M	88	LIMANOV A B	83
KRASNOPEVTSEV V N	48	KUZ'MENKO A V	55	LINEV A F	89
KRAVCHENKO A F	91	KUZ'MICHEV I K	15	LISINA O K	62
KRAVCHENKO V B	22	KUZ'MICHEV V M	86	LISITSA M P	25,69,71,75
KRAVCHENKO V I	15,79	KUZ'MIN M V	57	LISOVENKO V A	71
KRAVCHUK A L	36	KUZ'MIN V A	57	LISTVIN V N	40
KRAVETS A N	83	KUZ'MIN V N	11	LITVAK A G	26
KRAVTSOV YU A	24	KUZ'MIN V S	25	LIUKONEN R A	52
KRAYNOV V P	49,57,69	KUZ'MIN V V	30	LOBANOV B D	49,80
KRAYUSHKIN S V	33,34	KUZ'MIN YU I	69	LOBAZOV A F	38
KREKOV G M	49	KUZ'MINA N P	57	LOBOYKO A I	11
KREYNDEL' YU YE	18	KUZ'MINA T I	59	LOGUNOV S L	34,38
KRINDACH D P	59	KUZ'MINSKIY A L	52	LOKHOV YU N	84
KRISYUK V YA	59,60	KUZNE V S M	53	LOMAYEV M I	71
KRIVOSHILYKOV S G	43	KUZNETSOV A A	8	LOMONOV V A	1
KRUGLIK G S	1	KUZNETSOV A I	48	LOPATKO V N	74
KRUGLYAKOV V L	50	KUZNETSOV B V	20	LORENZ U	79
KRUPEN'KIN T N	33	KUZNETSOV I M	21	LOSKUTOV V S	50
KRUPKIN V KH	58	KUZNETSOV V I	31,39,50	LOYKO N N	5
KRUTIKOV V A	50	KUZNETSOV V V	68	LUCHT H	34
KRUTOVA L I	1	KUZNETSOVA N A	8	LUGINA A S	27,78
KRUUSIMYAGI T E I	14	KUZNETSOVA YE M	21	LUKIN A YA	9
KRYANINA M N	85	KVAPIL J	2,16	LUKIN V P	53,92
KRYLOV K I	8,10	KVAPIL JOS	2	LUKOMSKIY N G	79
KRYLOV P S	59			LUKOSHIN V A	69
KRYSTEV T	48	LAKEYENKOV V M	72	LUK'YANETS YE A	8
KRYUKOV P G	14	LALETIN A P	85	LUPASHKOV YE A	20
KRYUKOVA I V	87	LAPIDES A A	55	LYAKHOV G A	24,29
KRYZHANOVSKIY V I	6	LAPIN A D	32	LYALIN G N	79
KUBAREV A V	58,59	LAPPO O I	39	LYAMSHEV L M	32,54
KUBAREV V A	35	LAPTEV I D	76	LYAPTSEV A V	25
KUBE E	58	LAPTEV V V	3	LYASHKO I I	13
KUBECEK V	2	LARIONOV V R	35	LYSAK YU D	51
KUCHA V V	22	LARIONOV V V	45,46	LYSKOV V P	83
KUCHINSKIY A A	79	LARIONTSEV YE G	16	LYUBCHENKO V M	2
KUDINOV I A	33,34	LARKIN A I	54	LYUBIMOV V V	15
KUDRIN A B	61	LASTIVKA V I	5	LYUBIMTSEV V A	79
KUDRYAVKIN YE V	7	LATUSH L T	79	LYUBINSKAYA R I	64
KUDRYAVTYSEV V G	33	LAUTH H	83	LYUBLIN B V	79
KUKA G	44	LAVRENT'YEVA L G	75		
KUKHARCHIK P D	54	LAVRENTYUK V YE	11	MAGOMADOV R M	83
KUKHTAREV N V	64	LAVRIK V V	30	MAK A A	2,6,52
KULAGIN O V	28	LAVRINOVICH A V	84	MAKAREVICH A N	55
KULAGINA S N	52	LAVRROVA V M	38	MAKAREVICH S A	47
KULAK G V	45	LAZAREV S V	54	MAKAROV G N	11,68
KULAKOV S V	92	LAZAREVA G V	46	MAKAROV V G	17
KUL'CHIN YU N	64	LAZAREVA L YE	90	MAKARSKAYA N V	37
KULEVICHYUS CH	26	LEBEDEV G P	49	MAKHMUTOV E G	55
KULIKOVA N I	64	LEBEDEVA V V	92	MAKHSUDOV B I	6,44
KULYA S V	79	LEBED'KO YE G	68	MAKIN V S	84
KULYUK L L	23	LEBO I G	30	MAKOVETSKIY A A	36
KUMEKOV S YE	25	LEHMANN J	41	MAKSIMOV L V	78
KUMPYAK YE V	71	LEIDENBERGER G	58,59	MAKSIMOV N I	38
KUPCHENKO L F	22	LEINE L	69	MAKSIMOV V N	59
KUPRIYANOV N L	15	LEMESHKO V V	27	MAKSIMOVA N T	49,80
KUPRIYANOVA YE B	64	LEONOV I P	39	MAKSIMOVA O G	4
KUPTSOV A D	19	LEONOV YE I	33,41,72	MAKSIMOVSKIY S N	5
KURBANAYEVA F SH	37	LEONTOVICH A M	26,35	MAKSIMYAK P P	60
KURBANOV K	3	LEONT'YEVA O V	62	MALAKHOV V I	4
KURBANOV KH M	91	LEPARSKIY V YE	19	MALEYEV D I	79
KURBATOV L N	5	LEPNEV L S	73	MALIKOV R F	26
KURDOGLYAN M S	57	LERMAN A A	30	MALIKOV S N	51
KURDYUMOV S P	56,57	LESYAK S	69	MALINETSKIY G G	56
KURILOV I V	88	LETOKHOV V S	56,57	MALINOVSKIY A L	17
KUROCHKIN V YU	8	LEVENBERG V A	61	MALOV A N	18,63
KURUNOV R F	55	LEVIN M B	7	MALYAROVSKIY A I	53

MALYKHIN K V	42	MIKLAVSKAYA YE M	27,78	NAPARTOVICH A P	11,51
MALYKHINA N N	7	MILIKH G M	56	NARUTA V YE	7
MAMATKULOV M N	50	MILOVSKIY N D	52	NASIBOV A S	4
MAMEDOV N G	38	MILYAVSKIY YU S	39	NATAROVSKIY S N	46
MAMYRGAZIYEV S T	66	MILYAYEV V A	53	NAUGOL'NYKH K A	47,67
MANAK I S	5	MILYUTIN YE R	50	NAULIK L R	29
MANDEL' A YE	17	MINAYEV S M	85,86	NAUMENKOV P A	76
MANDROSOV V I	65	MINOGIN V G	80	NAYBOYKIN YU V	47
MANEK B	2	MIRIDONOV S V	53	NAZARALIYEV M A	48
MANOPOV E B	39	MIROSENKO S I	53	NAZARENKO P N	1
MANTHE K H	44	MIRONOV A G	.73	NAZAROV V D	39
MANYKIN E A	51,75,76	MIRONOV A V	59,77	NAZARYAN A O	49
MARAKHONOV V M	2	MIRONOV V L	48	NAZATOR A I	18
MARDEZHOV A S	64	MIROVITSKIY D I	56	NECHAYEV S V	38
MARDIROSOVA I V	1	MIRZAYEV A T	50,66	NECHAYEV YU S	31
MAREK J	2	MISAKOV P YA	76	NECHIPORENKO V N	36
MARGOLIN L YA	90	MISHIN V A	76	NEDOLUGOV V I	7
MARIN M YU	90	MISHKE B A	58	NEDOREZOV V G	90
MARKARYAN G R	73	MISHUSTIN V V	37	NEFEDOV A P	65
MARKIN A S	27	MIS'KEVICH A I	9	NEKRASHEVICH YA I	77
MARKOV N N	58	MISYUNAS G A	78	NEKRASOV A I	65
MARKOV P	58	MIT'KO S V	64	NEKRASOV G L	33,71
MARKOV V B	59	MITKOKH D I	37	NEMOSHAKALENKO V V	86
MARKUSHEV V M	74	MITROFANOV V P	65	NEPOKOYCHITSKIY A G	86
MART'YANOV A N	40	MITROPOL'SKIY O V	52	NERKARARYAN KH V	25
MARTYENKO S V	60	MITSKEVICH N V	45	NERSISYAN M N	27
MARTYNOV V P	79	MIZERACZYK J	9	NESHCHIMENKO YU P	13
MARTYUKHINA L I	64	MNUSKIN V YE	14	NESTEROVA Z V	42
MARUGIN A V	4	MOGILEVICH V N	41,42	NEUDACHIN A V	58
MARUSIY T YA	29	MOGILKO V A	65	NEUSTROYEV L N	21
MARYNKO A A	43	MOGIL'NITSKIY S B	45,46	NEYMANZADE I K	73
MASHKO V V	81	MOISEYENKO YE V	79	NIFTIYEV G M	74
MASKEVICH S A	60	MOKHOV A V	65	NIKIFOROV K G	4
MASLOV K V	83	MOLDOVAN Z	57	NIKIFOROV V G	14
MASLOV V A	19	MOLODTSOV O I	13	NIKITCHENKO G V	3
MATSKO M G	76	MOLODYAN I P	3	NIKITIN A I	57
MATUKHNOV V M	86	MORDOVETS N A	89	NIKITIN L N	83
MATVEYETS YU A	57,79	MORICHEV I YE	83	NIKITIN V A	53
MATVEYEV A Z	52	MOROZOV D A	51	NIKOLAYEV V A	22
MATVEYEV V K	28	MOROZOV N V	49	NIKOLAYEV V D	85
MATVEYeva YE S	50	MOSKOVETS YE V	56	NIKONOV YU P	10
MATYAGIN YU V	49	MOSTOVNIKOV V A	38	NIKONOVA M V	6
MAVLEYEV F F	85	MOTORIN I V	6	NISHCHAK YU N	48
MAY H J	44	MOTORNAYA A A	83	NOKS P P	38
MAYYER A A	25	MOTSNEY F V	71	NOL'DE S YE	73
MAZAN'KO I P	10	MOVSESYAN M YE	25,75	NOLTE L	18
MAZANKO V F	86	MOVSHCHEVICH V Z	35	NOSACH O YU	36
MAZURENKO S L	55	MOZHAROVSKIY A M	26,35	NOSENKO A YE	32
MAZURENKO YU T	59	MUELLER R	40	NOSKOV M F	60
MEL'CHENKO S V	71	MUELLER W	62	NOSKOVA A D	37
MELIKSETYAN T E	7,34	MUKIMOV K M	46	NOSOV V N	67
MELKONYAN T A	33	MULDASHEV T Z	46	NOSOV YU R	92
MEL'NIKOV L A	24	MUMLADZE A N	70	NOVGORODOV M Z	11
MEL'NIKOV L YU	14	MURADYAN A ZH	27,30	NOVIK A YE	15
MEL'NIKOV V M	84	MURAV'YEV A A	76	NOVIKOV A D	24
MEL'NIKOV V N	61	MURAV'YEV I I	8	NOVIKOV N I	58
MERENKOV N P	90	MUROKH I YU	47	NOVIKOV V D	80
MERINOV I G	83	MURZIN A G	6	NOVOPASHIN S A	30
MERKULOV I A	82	MURZIN V N	4	NOVOSEL'SKAYA A I	85
MESHKOV G G	37	MYACHIN V YE	87,88	NOVOZHILOVA YU V	35
METEL'SKIY G A	38	MYALITSIN L A	90	NOWICK W	69
METLINSKIY P N	77	MYASNIKOV A YU	13		
MEYER J	83	MYKITYUK V I	42	OBUKH V F	64
MIERCZYK Z	2,22	MYTSYK B G	65	OBUKHOVSKIY V V	27,28
MIGACHEV S A	31	MYZNIKOV YU F	17	OCHKIN V N	74,76
MIGULIN A V	50			ODULOV S G	28
MIHAILESCU I N	85,86	NADENENKO A V	27,78	OGANESYAN M K	27
MIKHALEVSKIN A B	79	NADEYKIN A A	57	OGURTSOVA L A	47
MIKHAYLOV A YE	17	NADEZHdin B B	36	OKHOTNIKOV O G	5
MIKHAYLOV V P	34	NAKHODKIN N G	85	OKISHEV A V	44
MIKHAYTLOVA T P	66	NANU L	85	OKS YE A	36,90
MIRHEYEV YU V	85	NANUSH'YAN S R	39	OKSUZYAN S S	70

ONISHCHENKO A M	72	PERGL J	42	POLOVINKO I I	67
ONOKHOV A P	83	PERLIN YE YU	70	POLUKHIN V P	85
ORAYEVSKIY A N	14,25,57	PERMINOV S V	41	POLYAKOV A F	65
ORLOV L N	77	PERNER B	2	POLYAKOV G A	73
ORLOV V K	7	PEROV A N	48	POLYAKOV L	65
ORLOV V M	21	PERSONOV R I	74	POLYANSKIY V K	60
ORLOV YE P	36	PETKOV I	58	PONOMARENKO A G	11
OSADCHUK L A	90	PETRASH G G	68,83	PONOMARENKO V I	83
OSIKO V V	3	PETRIK S	66	PONOMAREVA O I	65
OSIPENKO F P	49	PETRIKIN YU V	84	POPESCU GH	10
OSIPOV V V	21	PETROSYAN YE G	31	POPESCU I M	15
OSTAPENKO S S	69	PETROV A I	50	POPESCU-POGRION N	85
OSTROUMOV V G	3	PETROV A L	85	POPOV A M	90
OVAKIMYAN T O	25	PETROV A V	70	POPOV I A	64
OVCHARENKO A P	20	PETROV D V	31	POPOV V K	33,34
OZOLIN V V	58	PETROV I N	79	POPOVA T N	47
{		PETROV N S	47	POPUSHOV V V	3
PAK G T	17	PETROV S I	43	PORODINKOV O YE	14
PAKHOMOV A A	51	PETROV V I	28	POROSHINA M YU	64
PAKHOMOV I I	59	PETROV V M	9,14	PORTNOY YE L	34
PAL' A F	11	PETROV YU N	72	POTALITSYN YU F	71
PAL'M V	78	PETROVA T A	26	POTAPOV A B	57
PALKIN A M	91	PETROVSKIY G T	87	POTAPOV O A	62
PANAIOTTI N N	26,30,53	PETROVSKIY V N	8	POTAPOV S K	24
PANAYOTOV K P	22	PETRUN'KIN V YU	24	POTAPOV V L	40
PANCHENKO A N	71	PETTSELT YA	20	POTAPOVA N I	66
PANCHENKO M V	50	PETUKHOV A G	7	POVALYAYEV O A	68
PANCHENKO V YA	9,70	PETUKHOV A V	23	POVET'YEV YA G	45
PANECKI P	53	PEYEEVA R A	22	POZDNYAKOVA YE YE	8
PANOV V P	48	PFEIFER J	3	POZHAR V E	31
PAPANYAN V O	9	PICHUGIN V V	11	PRANAYTIS R V	19
PAPAZYAN T A	27	PIGULEVSKAYA L D	39	PREYSVERK KH P	84
PAPYAN V A	22	PIKULEV A T	38	PRIKHOD'KO A S	90
PARAKHIN V YE	63	PILIPETSKIY A N	28	PRIKHOT'KO A F	33
PARAMONOV A A	54	PILIPOVICH V A	53	PRILEZHAYEV D S	6
PARAMONOV A G	62	PIL'SKIY V I	90	PRILIPKO V K	80
PARASHIKOV I KH	58	PINKEVICH I P	27	PRISHIVALKO A P	44
PARFENOV V G	17	PIROGOV F V	72	PRIVALOV V YE	65,77
PARFIANOVICH I A	1	PIRYATINSKIY YU P	71	PRIYEZZHEV A V	64
PARITSKIY L G	21	PISKARSKAS A	34	PROCHAZKOVA O	6
PARKHOMENKO YU N	15	PISKUNOV A K	20	PROKHORENKO V I	7
PASHCHENKO V Z	34,38	PIS'MENNYY A YU	42	PROKHOROV A M	3,17,28
PASHIN S YU	67	PIS'MENNYY V D	11,73	{	36,61
PASHININ P P	7	PITEY V N	29	PROKHOROVICH A V	77
PASHKOV V A	69,72	PIVOVAR N I	64	PROKLOV V V	22
PASKER H	43	PLASKIY YU S	46	PROKOPENKO V T	86
PASMANIK G A	28,52	PLATONENKO V T	33,34	PROKOPOV A P	11
PASYUK A S	89	PLATONOV YE M	55	PROSKURA A I	80
PATRUSHEV G YA	50	PLESSKIY V P	32	PROTSENKO I YE	25
PATSAYEVA S V	29	PLOTNICHENKO V G	43	PROTSENKO YE D	8
PAVLENKO V K	27,78	PLYATSKO G V	88	PRUSS-ZHUKOVSKIY S V	10
PAVLISHIN I V	10	PODKATOV V I	89	PRYALKIN V I	50
PAVLOSHCHUK V A	33	PODMAR'KOV YU P	14	PRZHEVSKIY S S	58
PAVLOV E L	87	PODMOSHENSKIY I V	17	PRZHONSKAYA O V	7
PAVLOV S V	19	PODVYAZNIKOV V A	61	PSHENICHNIKOV M S	28
PAVLOVA N I	27	POD'YACHEV S P	69	PSHEZHETSKIY S YA	58
PAVLOVA V T	72	POEHLER M	18	PUCHIN YU V	5
PAVLOVICH V S	34	POGORELOV A YE	86	PURVANOV P S	39
PECHENOV A N	4	POGOREL'SKIY YU P	88	PUSPOKI S	3
PEGOV A A	62,70	POGOREL'SKIY YU V	87	PUSTOGAROV A V	68
PEKAR S I	47	POGOSYAN K P	50	PUSTVOYT V I	31
PEKHTEREV A V	20	POGOSYAN P S	27	PUTILIN F N	56
PEKLENKOV V D	89	POGREBITSKIY K YU	35	PYASETSKAYA O V	8
PELETSKIY V E	86	POKASOV V V	50	PYATAKHIN V I	44
PELIYEVA L A	76	POKHOROVICH A V	77	PYATAKOV P A	31
PENCHEV S P	48	POKHSRARYAN K M	34	PYATAYEV V Z	87
PERCAK H	9	POKROVSKAYA L A	37	PYATNITSKIY L N	88,90
PERCHUK O V	78	POLEVIN S D	35	PYSHKIN O S	47
PEREBYAKIN V A	64	POLISHCHUK V A	79		
PEREPECHAY M P	82	POLOMSKA M	81		
PEREPECHKO S N	42	POLONSKIY A K	38		
PEREPELKIN A L	30	POLONSKIY L YA	88,90		

RABKIN L M	79	RYAKHIN A D	51,52	SEMEONOV A S	36
RADACSI J	3	RYAZANOV N S	19	SEMEONOV V N	41
RADAUTSAN S I	4,77	RYBAK V M	76	SEMEONOV V V	24
RAGOZIN D S	13	RYCHEV M V	89	SEMEONOV YU G	25
RAKHOV A T	18	RYZHEVNIN V N	19	SEMIN G S	62
RAKHOV D A	46	RYZHIKOV B D	33	SEMIOSHKO V N	23
RAKHOV R F	49	RZEPKA J	60	SENATOROVA N P	33
RAKHVAL'SKIY M P	5	{		SENKOV N V	4
RAL'CHENKO V G	84	SAAKYAN L V	27	SENOKOSOV E A	72
RAL'CHENKO V I	7	SAARI P M	55	SENYUKOV A I	10
RAMAZANOVA G S	16	SAFONOV V P	25	SERAK S V	33,71
RASPOPOV N A	49	SAFONOV A V	48	SERDYUKOVA O A	58
RASPOPOV S F	7	SAFRONOV G S	55	SEREBRYAKOV V A	6
RASSKAZOV D S	92	SAGATELYAN M K	22	SERENIYI M	3
RASULOV I K	50	SAGITOV S I	49	SERGEYEV A M	26
RAUTIAN S G	25	SAID-GALIYEV E YE	83	SERGEYEV A S	35
RAVODINA O V	47	SAIDOV M S	92	SERGEYEV P B	49
RAYK YU B	14	SAIDOV Z S	3	SERKIN V N	28
RAZBIRIN B S	72,73	SAKHNO S P	78	SEROV A V	36
RAZENKOV I A	48	SAKIPOV N Z	75,76	SEROV O B	56
RAZUMIKHINA T B	50	SAKYAN A S	64	SEVAST'YANOV B K	1
RAZYGRIN B A	38	SALAMAKHA B S	9	SHABALIN A L	62
REBANE L A	80	SALASHIN S G	67	SHABLAYEV S I	80
REDKORECHEV V I	28	SALAYEV E YU	73	SHABLINSKAS V I	78
REICHE P	1	SALINOV S YU	76	SHAFIROVICH V YA	57
REMIGAYLO YU L	1	SAL'KOVA YE N	54	SHAKHVERDOV T A	80
REMIZOV N V	40	SALTIEL S	58	SHAKIN V A	47
RENUCCI M	82	SALTIEL S M	58	SHALAGIN A M	69
REPIN V N	44	SALYADINOV V S	85	SHALAYEV V M	32
RESHETNYAK V YU	25,27,29	SAMARIN A YU	13	SHANANIN R A	8
RESHETOV V I	4	SAMARSKIY A A	56,57	SHANSKIY L I	33
REYNFELDE M YA	72	SAMOKHIN A A	32	SHAPIRO D A	88
REYTEROV V M	33	SAMOKHVALOV I V	48	SHARAMKO L S	81
REZ I S	1,27,31	SAMOYLOV V D	88	SHARANGOVICH S N	32
REZNICHENKO V V	83	SAMSONOV G A	49	SHARIN P P	49
REZNICHENKO V YA	87	SANDOMIRSKIY V B	61	SHATSEV A N	51
REZNIKOV YU A	25,29	SANNIKOV B P	61	SHATUNOV YU M	90
REZVYY R R	64	SANNIKOV YU A	27	SHAYDUK A M	48,49
RICHTER J	21	SAPRYKIN E G	33	SHCHAGINA N M	79
RINKEVICHUS B S	63	SARBU C	85	SHCHANIN P M	18
ROAZNOV V B	88	SARKISOV S E	1	SHCHAVELEV O S	6,66
RODIN A M	77	SARNADSKIY V N	55	SHCHEGLOV V A	13,14,20,23
ROGULICH V S	14	SAULEVICHUS V	61	SHCHEKIN YU G	43
ROGULYAK S V	59	SAUTENKOV V A	4	SHCHELEV M YA	61
ROHLICEK F	16	SAVCHENKO A N	49	SHCHERBAK YU M	32,53
ROMANENKO A A	42	SAVCHUK A V	54	SHCHERBAKOV A A	2
ROMANOV G S	88	SAVEL'YEV B A	45,46	SHCHERBAKOV I A	3
ROMANOVSKIY M YU	42	SAVINKIN A P	81	SHCHERBAKOV V N	49
ROSELT U	18	SAVINOV S YU	74	SHCHERBAKOV V V	72
ROSSIN V V	73	SAVINTSEVA L A	17	SHCHERBAKOVA N I	50
ROSSINA T V	73	SAVITSKIY G V	87	SHCHERBINA YU A	65
ROSSNER S	42	SAVITSKIY V G	88	SHCHERBO A B	13
ROSTOMASHVILI Z I	89	SAVITSKIY V K	17	SHELEKHOV N S	54
ROSTOV V V	35	SCHAFF W	44	SHELEMIN YE B	58
ROSTOVTEVA N V	56	SCHASTAK S	22	SHENDEROV YE L	91
ROZANOV V B	30	SCHIEMANN D	82	SHEPELENKO A A	11,59
ROZMAN M	24	SCHILLING E	62	SHEPELEVICH V V	46,55
RUBIN A B	38	SCHIMDT J P	62	SHEVERA V S	14
RUBINOV A N	74,76	SCHREITER W	42	SHEVEREV V A	79
RUDENKO K V	88	SCHROFEL J	42	SHEVTSOV B M	45
RUDNITSKIY V B	41	SCHULTZE D	1	SHEYREV A S	8
RUDOV I G	10,17	SCHULZEE M	69	SHEYNMAN M K	4,73,91
RUMYANTSEV A G	83	SEDOV B M	66	SHILIN V A	92
RUMYANTSEV K YE	21	SEDUKHIN A G	65	SHILOV A A	28
RUMYANTSEV V D	35	SEGUSHCHENKO S A	54	SHILOV A F	5
RUNETS L P	81	SEIFERT O	39,42	SHILOVA M V	72
RURUKIN A N	8	SFLEZNEV B V	90	SHINDIN S A	65
RUSOV N YU	52	SELISHCHEV S V	86	SHIPILOV K F	29,63
RUVINSKIY K D	67	SELYAVKO L V	54	SHIPUNOV V A	43
RYABENKOV V I	27	SEMENCHIK V G	54	SHIRAN N V	82
RYABUKHIN A V	83	SEMEONOV A A	92	SHIRKOV A V	53
RYABYKH V N	19	SEMEONOV A B	43	SHIROKOV YE I	11

SHISHKIN A I	10	SMIRNOV V A	3	STEL' MAKH N M	34
SHKADAREVICH A P	1	SMIRNOV V G	55	STEL' MAKH O M	76
SHKERDIN G N	16,31	SMIRNOV V I	65	STENINA V V	47
SHKLOVSKIY V A	83	SMIRNOV V M	41	STEPANOV A A	13,23
SHKLYAREVSKIY I N	20	SMIRNOV V S	71	STEPANOV A V	38
SHKUNOV V V	56	SMIRNOV YU V	43	STEPANOV G S	37
SHMAL'GAUZEN V I	52	SMIRNOVA Z A	34	STEPANOV K L	88
SHMAONOV T A	29,63	SMOL'SKAYA L P	80	STEPANOV S I	56
SHMAYONYAN S V	25	SMORGONSKIY A V	35	STEPANOV YE V	48
SHMELEV A K	52	SMUROV I YU	86	STEPINA S A	17
SHMIGLYUK M I	29	SMUTNYY F	81	STERIAN P E	15
SHMIT O A	78	SOBEL'MAN I I	76	STERLIN YU G	38
SHMYREVA T P	86	SOBOLEV N N	11,74,76	STETSENKO S G	89
SHORMANOV E V	38	SOBOROVA I G	43	STOYCHEV K T	26
SHOROKHOV O A	10	SOGOMONYAN S B	59	STOYEV N A	68
SHOTOV A P	4,48,76	SOKOL'NIKOV I A	61	STREKALOVSKIY O V	43
SHPAK A M	69	SOKOLOV A L	15	STRELKOV G M	50
SHPAK I V	10	SOKOLOV A V	92	STREL'TSOV V N	32
SHPAK M T	16,71	SOKOLOV I A	87,88	STRUK I I	76
SHPAK V G	18	SOKOLOV L S	88	STUCHEBRYUKHOV A A	80
SHPILEVOY B N	22	SOKOLOV V A	15	STUDENYAK I P	80
SHTANOV A A	23	SOKOLOV V G	61	SUBASHIYEV A V	29
SHTERN E K	81	SOKOLOV V N	59	SUBASHIYEV V K	80
SHTILERMAN A L	38	SOKOLOVA YE A	78	SUCHKOV V A	22
SHUL'GA A M	77	SOKOLYUK YE F	39	SUDOV A S	90
SHUL'MAN A YA	89	SOLDATOV B I	67	SUESSE R E	34
SHULYAT'YEV V B	11	SOLDATOV V P	33	SUETIN N V	18
SHUMOVSKIY A S	23	SOLOMAKHA D A	66	SUKHAREV A G	29
SHUMSKAYA L I	11	SOLOMATIN V A	21	SUKHAREVA L K	1
SHUNYAKOV V T	30	SOLOMATIN V S	28	SUKHENKO V P	13
SHUR YE A	84	SOLOMATIN YU V	54	SUKHODOL'SKIY A T	7
SHURKIN V I	38	SOLOMOKO A A	17	SUKHOIVANOV I A	43
SHUTOV D A	23	SOLOVEYCHIK YU B	61	SULKASHIN A S	14
SHUVALOV L A	79	SOLOV'YANCHIK D A	55	SULKASHIN S S	8,9,14
SHVARTS K K	72	SOROKA A M	10,17	SULTANGAZIN U M	46
SHVETS V A	64	SOROKA J	19	SUMKIN V R	41
SHVYDKOV A N	43	SOROKIN A	65	SURIS R A	4
SIDORENKO V S	22	SOROKIN A V	81	SURKOVA V K	37
SIDORUK N V	35	SOROKIN V A	33	SUSENKO L N	59,60
SILANT'YEV A YU	50	SOROKIN V N	76	SUSHKIN V N	16
SIL'NOV S M	89	SOROKIN YU M	51	SUSLIKOV L M	20
SIMONOV G V	33	SOROKINA I M	46	SUTORIKHIN I A	49
SINKEVICH V I	43	SOROKINA I T	3	SUVOROV K G	89
SINNIKOV YU A	78	SOSKIN M S	29,54	SUVOROV M B	52
SINYAVSKIY P N	33	SOWOIDNICH K	82	SUVOROV YE V	44
SISAKYAN I N	43	SPANGENBERG P	39,42	SVELEBA S A	67
SIVACHENKO S D	5	SPAZHAKIN V A	11	SVERDLOV B N	5,6
SIZOV F F	72	SPEKTOR B I	90	SVETASHEV A G	75
SIZYKH A G	81	SEPEVAK I S	53	SVICH V A	19
SKAKUN V S	18	SPIRIDONOV M V	76	SVIRIDENKOV E A	49,75
SKEGIN V L	88	SPIRO A G	79	SVIRIDOV A P	56
SKODA V	65	SPITZEL R	21	SVIRIDOV K N	51,52
SKOK E M	91	SPIVAK A V	51	SVIRIDOVA R N	70
SKOPINA V I	31	STABINIS A	34	SYCHEV I A	64
SKRINSKIY A N	90	STABNIKOV M V	66	SYNECEK J	16
SKRIPACHEV I V	43	STANCHITS L K	88	SYRBU A V	3
SKRIPKIN V A	5	STARCHENKO A N	64		
SKRIPKO G A	1	STARIK A M	13	TABACHNIK YE M	86
SKRIPNICHENKO A S	68	STARIK P M	5	TADZHI-AGLAYEV KH G	33,74
SKVORTSOV A K	83	STARIKOV A D	6	TAGER A A	4
SKVORTSOV L I	41	STARIKOV A M	33	TAGIYEV O B	74
SLEPOVICH I A	85	STARKOV A V	49	TAKLAYA A A	50
SLINKO V N	9	STARODUB V P	14	TAL'ROZE V L	57
SLIN'KO V N	14	STAROSTIN A N	11	TAMANIS M YA	69
SLIVKA V YU	20,80	STARUKHIN A N	72,73	TAMANYAN G YU	13
SLOBODYANYUK A V	29	STARUKHIN A S	77	TARANUKHIN V D	34
SMALIKHO I N	48	STARUKHIN YU	65	TARASENKO V F	9,18,71
SMAYEV V P	54	STASEL'KO D I	54,56	TARASOV A V	27
SMERDOV V YU	17	STEFANESCU E N	15	TARASOV G G	69
SMIRNOV A YA	81	STEFANOVICH V A	80	TARKHANOV N N	52
SMIRNOV B M	49	STEKHIN A P	39	TATSENKO V G	41
SMIRNOV M Z	67	STEL' MAKH G F	80	TAUSON V A	81

TAUTZ V	20	TURCHIN A V	70	VERETENNIKOV V V	50
TEPLYASHIN L L	81	TURKIN N G	11	VERGUN V V	50
TER-AKOP'YAN G M	77	TUROVETS I M	56	VERGUNOVA G A	88
TERENETSKAYA I P	79	TUSNOV YU I	27	VERIGIN A A	89
TERENT'YEV YA V	70	TUTUNARU M	86	VERKHOVSKIY YE B	64
TERESHCHENKO A G	39	TVERDOVSKIY V I	66	VEROLAYNEN YA F	81
TERESHCHENKO YE D	56	TVOROGOV S D	92	VERTIY A A	15
TERPILOVSKIY A I	81	TYMCHIK G S	78	VESHCHUNOV M S	85
TETEREV A V	88	TYMKUL L V	47	VETSEL' K	77
TETERIS YA A	72	TYMKUL V M	47	VEYKO V P	86
TIGINYANU I M	77			VIKTOROVA A A	81
TIKHOHOMIROV I A	66	UDAL'TSOV B V	10	VIL'DANOV R R	66
TIKHOHONCHUK V T	30, 53	UDOD L V	29	VILL A A	14
TIKHONOV YE A	7	UFIMTSEV V B	88	VINOGRADOVA T A	20
TIMOFEYEV F N	31	UFIMTSEVA R N	81	VINTIZENKO L G	18
TIMOFEYEV T T	54	UGLOV A A	84, 86	VITUSHKIN L F	67
TIMOSHIN I YA	61	UMANSKIY S YA	57	VIZEL' A A	43
TIMOSHIN V T	76	UMNOV S P	66	VLASKO-VLASOV V K	67
TISCHER K	39, 42	UMYSKOV A F	3	VLOKH O G	67
TISNEK T V	21	UNGUREANU C	57	VODCHITS A I	81
TITARENKO S I	82	URAKOV V V	79	VODNEV A A	35
TRACHENKO B K	68	URBANOVICH V S	1	VODOP'YANOV L K	73, 74
TLIYACHEV V B	70	URSAKI V V	77	VOINOV S S	84
TOCHILIN S D	63	URSU I	66	VOLENKO V V	90
TOGATOV D V	78	URYADOV V N	43	VOLKOV A A	20
TOLKACHEV A V	66	USHAKOV N G	53	VOLKOV S A	60
TOLKACHEV V S	18	USHAKOV V N	44	VOLKOV S N	89
TOLMACHEV A I	34	USHKOVA I N	37	VOLKOVA YE A	16
TOLMACHEV V A	60	USIKOV A YA	93	VOLODKINA V L	86
TOMANEK P	66	US'KOV V M	85	VOL'POV A L	52
TOMASHEVSKIY N A	86	USMANOV T	28	VOLYAK K I	53
TOPCHIY S B	72	USOSKIN A I	66	VONSOVSKIY S V	36
TOPCHYAN I I	82	USPENSKAYA L S	67	VOROB'YEV A A	19
TOPKOV A N	19	USTINOV N D	51, 52	VOROB'YEV A YA	86
TOPOROV V I	20	USTYUGOV V I	2	VOROB'YEV V G	81
TOPTYGIN D D	75	USTYUZHIN V V	70, 72	VOROB'YEV V S	86
TOPTYGIN V V	71	UVALIYEV M I	88	VRONICH V YE	60
TORCHINOV KH Z	91	UVAROV F A	67	VORONKO A I	16
TORGASHEV V I	79, 81	UYUKIN YE M	30	VORONOV S A	67
TOROPOV S YE	75	UZIYENKO D A	89	VOROPAY YE S	60, 81
TORPACHEV P A	81			VOYSHVILLO N A	50
TRABERT S	43	VALAKH M YA	69, 75	VOYENKO I G	20, 45
TRAKHTENBERG L I	56	VALIYEV K A	36	VOYTOVICH A P	81, 93
TRAVNIKOV V V	73	VALOV P M	68	VYATKIN S P	66
TRIFONOV YE D	26	VAL'SHIN A M	34	VYAZ'MINA T M	85
TRINCHUK B F	14	VALYAYEV A B	43	VYGON V G	51
TROFIMENKO A M	52	VARDANYAN R S	26	VYSLOUKH V A	34
TROFIMOV G S	56	VARNAKOV S I	37	VYSOTSKIY YU P	13
TROFIMOV M G	81	VARNAVSKIY O P	26, 35	VYZHIGIN YU V	67
TROFIMOV V A	26	VASHCHUK V I	7		
TROITSKIY YU V	10	VASILENKO N P	75	WALDMANN J	44
TROYAN YU G	72	VASILIU V	66	WALKOW F	7
TRUMMAL M	78	VASIL'YEV A B	11	WEIS M	22
TRUSOV V P	13	VASIL'YEV A N	33, 87, 88	WESTPHAL K	18
TSANEV V	48	VASIL'YEV A V	43	WESTPHAL K D	44
TSAREGRADSKIY V B	4, 16	VASIL'YEV S S	38	WESZKA J	82
TSAREV A V	31	VASIL'YEV V V	53	WILFERT O	67
TSAR'KOV V A	10	VASIL'YEV YU B	4	WOLF R	83
TSEBULYA G G	84	VASIL'YEV YU G	19	WUNSCHE H J	5
TSEKHOMSKIY V A	47	VASIL'YEVA G S	81	WURBS G	44
TSELINKO A M	36	VAVILOV V S	72		
TSINTSADZE N L	89	VAYTKUS YU	26	YABLONSKAYA YE YE	57
TSIOPA YE A	79	VAYTKUS YU YU	19	YAKHNIN V Z	32
TSKHAY S N	74	VDOVIN A V	91	YAKIMCHUK V I	67
TSULAYA N I	88	VEKLENKO B A	26	YAKIMENKO S N	9
TSVETKOV A D	66	VEKSLER V I	26	YAKOBSEN K S	20
TSVIRKO M P	75, 80	VELICHANSKIY V L	4	YAKOVKIN I B	31
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YERMACHENKO V M	8	ZHUKOV S S	22
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YERMAKOVA S V	2	ZHUPANOV V G	68
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